

THE SOUND OF THE WIND (Illustrated). By Professor W. H. Bragg.
 NOTES ON YOUNG BITTERNS (Illustrated). By Miss E. L. Turner.

COUNTRY LIFE

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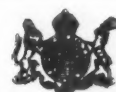
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E. O. HOPPE

THE MARCHIONESS OF HARTINGTON.

7, Cromwell Place, S.W.

COUNTRY LIFE

THE JOURNAL FOR ALL INTERESTED IN
COUNTRY LIFE & COUNTRY PURSUITS

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IS AN AGRICULTURAL PUSH POSSIBLE?

EVENTS are showing with invincible logic that the future of this country depends on increased production and particularly on increased food production. There was little sense, even in pre-war days, in a country so thickly populated as this depending upon imported food for its subsistence. But the case for increased production is very much stronger now. First we have to prepare for war. Whatever may be the inherent virtue of the League of Nations, it cannot ensure us against conflict, at any rate, in the immediate future. The League will have to be in existence for some length of time before it can be worked effectively. A glance at the present moment over the civilised world shows that it has not perceptibly affected the animosities and ambitions which, in the end, produce war. We hope better things in the future, but in the meantime the old advice to keep your powder dry is the only one worth attention. The truth is that Great Britain, whether she likes it or not, may be dragged into a quarrel at any time, and the safe course is to take effective means for ensuring the feeding of the people. Besides, apart from the prospects of war, this is a good thing in itself.

It would be tedious to recount once more the reasons why agriculture is the most important of all industries. Surely the mere fact that it is the means of producing that food without which life is impossible ought to be sufficient. Nor is it worth while to argue again at this late hour that the farmers of Great Britain are exceedingly well situated for selling their produce. They

have the best markets in the world within arm's reach. Further, the standard of living has been very much raised among the working classes, and that in itself would ensure an abundance of purchasers. If the retort be made, as it often is, that the advantage of the proximity of markets is neutralised by the expense and inefficient methods of transport, why, then, these must be reformed and improved. If the great measure passed in the last session of Parliament does not succeed in improving transport, the country will have to insist upon it giving place to something more efficient. Obstacles of this kind are very far from being insurmountable. The outcry against the high prices of labour and shorter hours cannot be looked upon either as rendering the attempt to make the country self-supporting, as far as food is concerned, abortive. After all, wages have been raised and hours shortened in all other great producing countries, and Great Britain, if she were handicapped, has the power to remove the handicap. But as compared with the United States of America, which is the great food producing country of the world, our farmers stand at little disadvantage. We do not by any means insinuate that they have no grievance. On the contrary, many of the regulations in regard to labour are probably absurd. The Wages Board has not succeeded in making arrangements that will at the same time add to the comfort of the workers, and also increase production. It looks as if the deliberations of this body had been mostly directed to finding out means of appeasing the clamour of the workers.

The advantages of speeding up agriculture are so obvious that a call to the country would almost certainly meet with a response, especially as, if the movement were well launched, it would conduce to the comfort and prosperity of all engaged in it. The farmers must have a guarantee. Objections to this are made on the ground that it means protection. We who are thinking of the question without any reference to party cries do not think the critics are wrong. It is protection that agriculture demands at the present moment. But we have always contended that whatever steps be wanted to set the industry going with increased activity, the object should always be kept in mind of making itself supporting. There is no reason in the world why farming in Great Britain should not become a most lucrative calling needing no State support whatever. For ten years, nevertheless, it may need a helping hand. At the end of that time the efficiency reached would enable farming to go on without support in the future. We know exactly what the standard is at which we should aim. Sir Charles Fielding says that five counties did so well during the war that by intensive cultivation they raised more than the proportion required of them—so much more that if all the counties had done equally well Great Britain would have not only provided her own food supplies, but a surplus for export. Now, it would be no easy matter to work the less zealous counties up to so high a standard, but it should not be beyond the power of the Minister of Agriculture to do so now that there has been given him the machinery and the personnel he requires for the purpose. One great advantage of guaranteeing prices to the farmers would be that it would necessitate their submission to judgment by results. Farmers who do not come up to the standard of productiveness required of them should, after due warning, be ruthlessly removed to make room for better men. It is not going to be any easy task, but nevertheless it is one that can and should be performed, and we hope Lord Leconfield or whoever may succeed him, will stiffen his back for the uphill work which will be necessary.

Our Frontispiece

THIS week's portrait is of the Marchioness of Hartington. The second daughter of the Marquess of Salisbury, she was married in 1917 to the eldest son of the Duke of Devonshire, and has two little sons.

* * * Particulars and conditions of sale of estates and catalogues of furniture should be sent as soon as possible to COUNTRY LIFE, and followed in due course by a prompt notification of the results of the various sales.



COUNTRY NOTES

FROM the National Farmers' Union we have received a summary of the proposals made for the effective reconstruction of British agriculture and the increase of home-grown foodstuffs. It is a document of some length and many of the proposals put forward require the most careful consideration. This we hope to give them at an early date. In the meantime we must be content with pointing to one or two reforms about which there can scarcely be any contention. There is, first, the farmers' grievance in regard to local taxation, which was convincingly set forth in the Melbourne Report. It took the case of two men residing in a rural district, one a professional man in the market town making an income of seven hundred and fifty pounds a year and living in a house assessed for local taxation at seventy-five pounds; the other a farmer who, from the produce of five hundred acres, earns an income equal to that of the professional man, seven hundred and fifty pounds per annum. His holding, including the house, if any, is assessed at the rate of thirty shillings an acre, which comes to seven hundred and fifty pounds a year. The farmer, then, is rated on the basis of an assessment of seven hundred and fifty pounds per annum, while the professional man, who, according to the hypothesis, earns the same income, gets off with an assessment of seventy-five pounds. Here we have a grievance which ought to be removed. The grievance would be accentuated if, as is proposed by the Prime Minister, the local authorities should undertake the financing of the new houses. They could not do this without a very considerable increase in the rates.

A SMALLER reform, but one almost as useful, would be the introduction of some uniform system into our weights and measures. On many occasions reference has been made to the inconvenience caused by the prevalence of local weights and measures so that the strange customer really does not know what he is buying. There are hundreds of these up and down the country and it would certainly conduce to simplicity and efficiency in business if an Imperial system were adopted and enforced. The need of dealing with pests and seeds is also an uncontroversial subject. Everyone will agree that legislation should be passed to prohibit the sale of grass and other seeds without guarantee of purity, germination and so forth. Injurious weeds should also be scheduled and efforts made to force every occupier of land, whether it be the local authority, a tenant or an owner, to keep down those weeds which are mostly easily disseminated. Animal pests, the rat especially, should be put in a similar category. No one should be allowed to harbour them, at any rate, if by any possibility they can reach the land of his neighbour. The application of that principle to ground game kept in woods adjacent to agricultural fields, would get rid of a serious part of the game difficulty. We should follow the example of Belgium and make it obligatory for the landowner to use wire netting to keep his game in, instead of forcing the farmer to do so to keep the game out.

WE are informed that preliminary steps have been taken for transferring the Kelham estates, Newark-on-Trent, from the British Sugar Beet Growers' Society to a public company called Home Grown Sugar, Limited. In this company the Government is taking a practical interest. Although it will not be under official control, solid help towards the establishment of a sugar factory in Great Britain is to be given. The auspices are certainly in favour of this important experiment. It is clear to every understanding that had Great Britain been provided with sugar factories, even on a much smaller scale than Continental countries, such as France, Belgium or Germany, the sugar famine of the war would never have occurred. Even up to the present moment the country is short of sugar, and the omens do not point to any great abundance during the time when it is most needed; that is to say, the jam-making season. Sugar beet, again, will practically be a new crop on English land, and we may fairly expect that what has happened elsewhere will happen here, namely, that it will be a profitable crop and will lead to better cultivation in every way.

THE last of Ireland's chief Barons, and also one of the greatest of her lawyers, passed away on Saturday night when the Right Honourable Christopher Palles died at Dublin. He was born on Christmas Day, 1831, and was therefore in his eighty-ninth year. He had held the office of Chief Baron from 1874. His predecessor was Chief Baron Pigot, who had been appointed in 1846, so that during the long period of threescore and ten years there had been only two occupants of the office. Chief Baron Palles was renowned not only as one of the most learned judges of his time, but also as one who fearlessly and in the fine word of the Prayer Book, "indifferently" administered justice. Those who came before him in his official capacity never could claim either that their position or wealth influenced him in their favour, or that poverty and friendlessness stood in the way of a fair hearing. He carried his good qualities into private life where he was known as an upright and genial member of any society he chose to enter.

SPRING'S ADVENT.

Now step by step, in God's good time,
Out of the pit the small days climb.

The black fogs passed, and left behind
Long black frosts, the black east wind.

But light and hope prevail, prevail;
The evenings lengthen, cold and pale;

Cold winds tossing the sooty trees
Come charged with hopes and memories,

And violets, cold and dark and sweet
Are selling in the gusty street.

JEAN SMITH.

SIR ARTHUR GRIFFITH-BOSCAWEN is undoubtedly right in advising country people to give more attention to poultry keeping. This would be particularly advantageous in the case of those who not only have enough land to house poultry, but also to grow feeding stuffs for them. Where everything has to be bought the game is not worth the candle, unless it be in the case of clever people who can hit upon some special feature. Poultry farming on a large scale remains, like Mr. Asquith's election, a dark and difficult adventure. It is well known that the productivity of fowls appears to decrease in proportion to the number kept; that is to say, a man keeping a thousand would get fewer eggs per bird than one with a flock of a hundred, the obvious explanation being that the fewer there are the better attention it is possible to give them. There has been a considerable fall in the price of eggs within the last fortnight or so. But the laying season has begun in earnest and prices were abnormally high. Before the war the present cheap rate of about threepence apiece would have been thought extraordinary. That prices must remain on a high level is due to the fact that years must elapse before there is any recovery of the enormous supplies we used to draw from Russia and other states of Eastern Europe.

IT is a long time since there has been so dramatic a match at Rugby football as last Saturday's match between England and Ireland at Dublin. With little more than half an hour left for play England found themselves, thanks largely to that still great player Lloyd, eleven points to the bad, and this though they had had rather the better of the game. Then they came with a rush and never slackened in this fine and sustained spurt till they had scored four tries. From one of them a goal was kicked, and so they just pulled a wonderful game out of the fire. It was, perhaps, rather characteristic of an Irish team to lose when in an apparently impregnable position. The qualities of the Celtic temperament tend in games sometimes to heroic recoveries, sometimes to unexpected collapses. But, even so, the English side deserve much praise for their fine uphill fight. It is one thing to receive chances and it is quite another to be able to take them when things are well-nigh desperate and excitement runs high. The tension was evidently very great, for two usually reliable kickers failed one after the other at a kick straight in front of goal, a failure which has about it something of the same agony as the short putt missed at golf. All the more credit to the English side that they "stuck it" so well to the finish.

THE most time honoured of institutions is not exempt from the effects of hard times, and the President of the Cambridge University Boat Club has been compelled to address a letter to members of the C.U.B.C. and other old Cambridge men on the subject of the University crew. Every attempt at economy has been made, but prices have so risen in every direction that the crew are faced with the possibility of having something less than the best in the matter of boat and oars, and of cutting short their period of training on the Thames. This last sacrifice would be particularly heavy, since already the fact of having to do much of their rowing on the sluggish waters of the Cam handicaps the men of Cambridge as compared with their rivals, who have the livelier Thames at their doors. It is to be hoped, and, indeed, there can scarcely be a doubt, that many old Cambridge men will come to the rescue by means of small annual subscriptions. As far as amusing himself is concerned, the average man, once he has left the University, takes far more interest in golf or lawn tennis than he does in rowing; but even to those who never went near the river and regarded rowing as akin to madness the University Boat Race is a sacred thing. It is greater than all the other matches at all the other games, and on that one day of the year Oxford or Cambridge, as the case may be, is still to be hated with all the vindictiveness of youth.

EVEN those who, like ourselves, heartily admire the noble art of boxing must draw the line somewhere. Nothing more ignoble has been witnessed than the tactics of the American champion, Dempsey, to aim at securing the largest possible amount of money for his contest with Carpentier. It was rather imprudent of him to show his hand so openly. Even his countrymen are beginning to draw comparisons between the pretension put up by their champion and the manner in which he declined to show his courage during the War. The contrast between him and Carpentier in this respect is too glaring. The Frenchman suspended his career in the ring when called upon to serve his country, and, what is more, put all the strength and energy he had into his military duties. Moreover, what money he had made before war broke out was lost by the end of it. The American has lived at home at ease and nursed his dollars. For that reason we cannot be surprised that those of his own nationality should be rather ashamed of their representative and that there should be a decided reluctance to provide him a place for the championship contest.

THE fortunes of Constantinople, after swaying this way and swaying that in the course of the War, seem to have been determined at last. M. Millerand has given an interview to a member of the Press in which he says definitely that the Sultan will be permitted to reign in Constantinople as a very limited monarch indeed. He will be allowed to keep little or no army, and the Straits are to pass into the guardianship of the Allies. What is to be done in Asia

Minor is not yet determined, nor will be until M. Venizelos comes into council. So pass away the hopes which Russians entertained at the beginning of the War. To the statesmen of St. Petersburg, no object was dearer than the acquisition by Russia of Constantinople. Indeed, it has been a dream of many centuries and the cause of many previous wars. But the loss of this opportunity is one of the prices paid for submitting to Bolshevism. Indeed, from the moment that the revolution broke out the idea of giving Constantinople to Russia began to fade more and more into the background, until it disappeared altogether. Also the hopes of those who thought at this late hour to carry out the "bag and baggage" policy enunciated long ago by Mr. Gladstone, are doomed to disappointment. But perhaps the Turks will discover some European virtue when they come into close contact, as they must, with Europeans.

THE French Minister of Public Works has just published some valuable statistics relating to the saving in France by the establishment of summer-time. In coal, now become a valuable mineral, the saving amounted to 511,000 tons. The Paris Gas Company alone saved about 15,600 tons, say one per cent. of its coal. The more economical use of electric light has also been a valuable result. It amounts to three per cent. in Paris, equivalent to 2,000 tons of coal. These are only items but they help to prove that every household stands to gain a perceptible something by utilising the morning sunlight for work and getting to bed earlier at night.

THE TARDY ASH.

I love you, tardy ash, whose roots are spread
So broadly through the bosom of the earth;
Yours is the wisdom of her senseless dead,
For in their night your being has its birth.
You who have known the faithlessness of May,
Can take no joy in youth; alone you stand
Unmoved, though all your wayward sisters play
When lightfoot April walks the shining land.

But on some summer evening, when the gloom
Is covering up your unimpatient leaves,
When round your ancient boughs the chafers boom
And reapers leave the rows of standing sheaves,
The living sap will cry in every shoot
The glory that lay buried at your root.

J. M. DE NAVARRO.

ACCORDING to the reply given in Parliament, the authorities have not up to now decided when summer-time should begin. It has already been done in France and Italy. If the economy and convenience of the extra hour of daylight be taken into consideration, it appears that Ministers are to blame for not making arrangements punctually. March is a month when the days have considerably lengthened; a time, too, when those who raise food in gardens and allotments should be as busy as possible. There is no reason why summer-time should not begin very early in March, and we hope that there will be no indecision or prolonged delay in fixing a date at which it is to begin.

IN the Budget on which Mr. Austen Chamberlain is now working it is to be hoped that some consideration will be shown for those who have to live on moderate salaries that have not been increased to any perceptible extent since the War began. They feel taxation more almost than anybody else and have to face a continual growth in the cost of the necessities of life. It is now announced that in January food prices went up another five per cent., making a rise of a hundred and thirty per cent. as compared with July, 1914. There is very little prospect of a fall taking place for a long time to come. It is said to be practically certain that Government butter will shortly be raised to three shillings the pound, and British butter is selling at five shillings. Sugar and groceries generally are all going up. These facts mean that the man with a moderate salary is going to have a very hard time indeed, and there is a great deal of sense in the suggestion that the line of exemption should be raised.

THE SOUND OF THE WIND

BY PROFESSOR W. H. BRAGG.

THE noises of the wind are by far the most notable of the country sounds. That is because our ears are especially fitted to detect vibrations or quiverings of the air; and such air quiverings are set up whenever the wind blows through the trees and hedges or over the irregularities of the ground. We may take two cases of sound caused in this way, and, considering them carefully, understand the general problem sufficiently well. Imagine an even-flowing stream of air to meet an obstacle like a branch of a tree or a fence wire. It might be thought that the stream would simply divide and join up again, leaving a little back-water, or back-air we ought, perhaps, to call it, just behind the obstacle which parted it. But, if the speed of the air is not too small, something happens which is less simple and very interesting. Little whirlwinds are formed in the air, first on one side of the backwater and then on the other; and these pass on with the wind, so that there is a long double series of them as in the figure, those on one side spinning one way, those on the other side, the opposite way.



Obstacle.

Direction of Wind.

At the same time the flow past the obstacle wavers from side to side, and this happens even though the obstacle is quite still.

With every alteration of flow from side to side an impulse is given to the surrounding air and a pulse or wave runs away in all directions. If there is an ear close by, a part of the pulse runs up against the drum of the ear and affects the mechanism attached to it. One such pulse by itself cannot create the sensation we call sound, but if several pulses arrive in regular

whirls which succeed one another regularly enough to give notes; and yet there are so many of them, and they vary so from time to time, that the sounds link themselves together in a babel of noise. When an extra gust comes the pitch of all the notes rises together and the roar becomes a shriek.

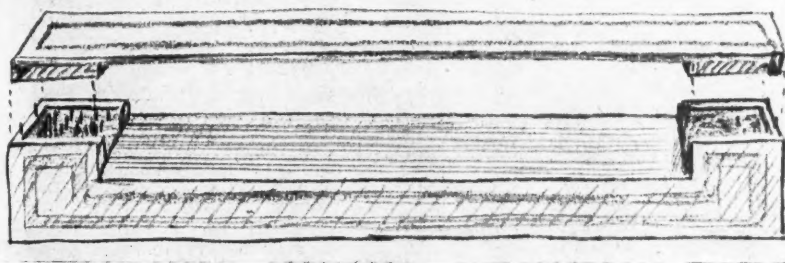
The sound of the wind in a wood depends on the nature of the trees. The thin stems of the pine needles break the wind into whirls succeeding one another with great frequency, and the sound is high-pitched but soft; but the broad surfaces of the beech leaves tear the wind to bits and start strong pulses in the air, so that a beech wood is noisy.

This curious partition of the stream with its accompanying whirls is the cause of many other familiar effects. As the whirls are formed first on one side, then on the other, the unequal flow of air right and left of the obstacle tends to make the obstacle itself rock from side to side across the stream of air. That is why the stays of a flagpole throb in the wind, and the flagpole itself; while in the fluttering of the flag one can almost see the whirls chasing each other down the sides. The same effects are found in the water as in the air. Whirlpools are formed as the water flows with sufficient speed past a pile. The anchor cable throbs when a boat is moored in a tideway; the fishing line vibrates when it has a heavy sinker to keep it down in the running water. A stick held in the hand and trailed behind a boat tries to go from side to side. In all cases the vibratory movement is transverse to the stream.

When it happens that the note of the wind, which depends only on its speed and on the size of the obstacle past which it is flowing, is the same as some natural note of the obstacle itself, then there is strong resonance and the note rings out loudly. This is why the telegraph wires sing in the wind. The Æolian harp depends on this effect for its music. A great number of wires are stretched on one sounding board, and placed so that the wind may play across them; that is all. The strings are tuned to a very low pitch, the same for all, because it is intended that the overtones, not the fundamental note, shall be the notes that are resonant to the wind-note. As the wind rises and falls, now one, now another of these notes is called into being; and the fact that the wires are not likely to be all of equal thickness makes it possible for several notes to be excited at once. They must be all in tune with each other, since all are overtones of the same fundamental note; yet the "seventh overtone" gives the harmony a certain wild quaintness because it is not found in our musical scale.

There is a second way in which the wind makes a sound. It sets the leaves rustling against one another. When they are made to rub in this way they start little shivering vibrations to which the ear is sensitive.

The way in which a leaf shivers in the wind may be studied by allowing pieces of paper of different forms to flutter to the ground, in which case the pieces are making their own wind as they fall. When a flat piece of paper, two or three times as long as it is broad—say, six inches by two—is allowed to fall it is readily seen that it acquires a uniform rotation and goes to the earth as if it were a wheel rolling down the underneath side of an inclined plane. The fact is that as it slides down and sideways, the fore part rides on to air, which is still at rest, while the hinder part rests on air which has begun to give way. This cocks up the fore part, so that it "pays off" before the wind; the paper runs up hill, stops and begins to fall, back end now foremost. The "bull-roarers" of the

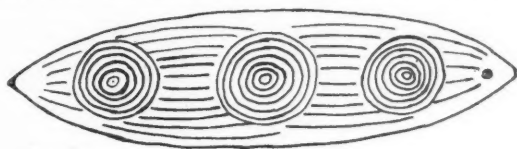


ÆOLIAN HARP (ABOUT TWENTY WIRES).
Opening larger in front than back.

succession and repeat at equal intervals the blow upon the drum, a sound is heard of definite pitch.

It is very difficult to explain what is meant by pitch, but no one is likely to need an explanation. It will be enough to say that when it is possible to assign a pitch to any noise it is always found that pulses are beating against the ear at some definite rate; pitch and rate go together, the former rises as the latter increases. When pulses arrive at the rate of thirty or forty a second the associated pitch is deep, as in the pedal notes of the organ; a rate of three or four hundred belongs to notes of middle compass; and a rate of three or four thousand to the highest notes of the piccolo. So when the wind blows past a wire or branch it sets up a regular succession of minute whirlwinds, and a corresponding series of pulses is launched into the air. These, when they reach the ear, cause, by virtue of their regularity, a note of given pitch. This is the origin of the singing of the wind.

It is known that the number of pulses set going each second by a wind flowing past a wire or other cylindrical object is nearly one-fifth of the number obtained by dividing the velocity of the wind by the diameter of the wire. Suppose that the velocity is ten miles an hour, which is nearly 15 ft. per second, and that the diameter of the wire is $\frac{1}{4}$ in. Then the velocity divided by the diameter is 720, and the number of pulses per second about 140; the corresponding note lies about the centre of the usual compass of a male voice. When the wind blows twice as fast or the obstacle is only half the diameter the note is an octave higher, and so on. When in summer we lie down in the thin, dry upland grasses there is the gentlest of whistling noises in our ears; the notes are so high because the grass stems are so fine. When in winter the gales roar through the bare branches it is torn into

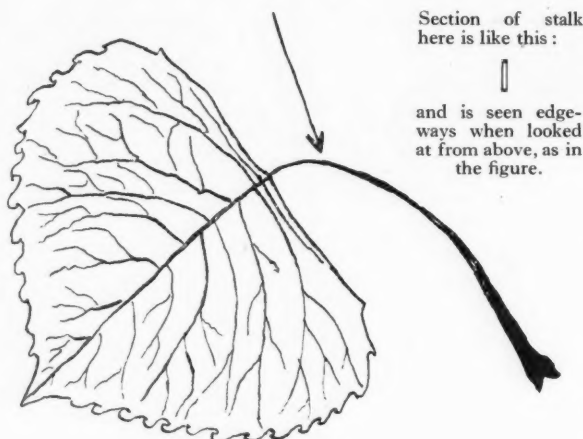


AUSTRALIAN BULL-ROARER.

Section.

Australian aborigines work in this way; they are pieces of wood several inches long and an inch or two wide. Swung round at the end of a string, say 3 ft. long, they rotate rapidly, twisting up the string as they do so. Their motion is exactly

the same as that of the rotating pieces of paper, except that the bull-roarer is held by a string which it has to twist up as it turns. When it has twisted the string until it will twist no more, the twisting stops and begins to reverse. As it spins round some fifty or a hundred times a second, it creates in the air a



POPLAR LEAF.

corresponding number of disturbances or pulses and so causes a "note." The noise as a whole consists of a series of loud groans or boozings, one for each twisting of the string, and are well calculated to frighten the women and children, who believe that

they hear the voice of a spirit. (N.B.—Do not use a poor piece of string because it is well twisted when in action and may become unravelled and break; a piece of good thin tape is best, it twists easily for its strength.) The leaf at the end of a stem cannot go round and round like the tape of the bull-roarer, but it goes as far as the twisting of its stalk will permit it, stops, and goes the other way. Thus it starts to flutter even though the wind is naturally quite steady. Sometimes one may notice a leaf to be fluttering wildly to and fro, far more than its neighbours, probably because the period of each flutter, which depends on the velocity of the wind, among other things, happens to coincide with the natural period of vibration of the leaf. The poplar rustles more than other trees because the leaf stem is pinched, as the figure shows, and twists very easily.

The leaves that flutter in this way rub against each other, and hence the rustling in the trees. Mr. Wilkinson, the blind botanist, observes that the rustle is soft when the leaves of spring are young and tender, but becomes harsher as the leaves dry and stiffen in the autumn.

These, then, are two ways in which noises are caused by the wind, the "Æolian tones" and the rustling of the leaves. With kindred noises they account for most of the wind sounds. The air that shears past all sharp corners or through openings is torn into whirls, though not perhaps in the same regular fashion as when it flows past a rod or wire. When the wind blows over irregularities of the ground and through the trees it must always become unstable and irregular in its movements; all the more so when trees bend before it and objects sway from side to side. So the whole air is churned up into quiverings and whirls large and small, and the drums of the ear are hammered by the multitude of pulses. That is how the noises of a windy day are called into being.

THE WIND IN SCIENCE AND POETRY

FEW things are more likely to stimulate thought than Professor Bragg's article, in which he explains "how the noises of a windy day are called into being." Those whose tastes lie more towards literature than science, and who, consequently, are more concerned about feeling than knowledge, will derive the greatest pleasure from it. For how beautifully the fabric of poesy rises out of accurate knowledge! "There's a wind on the heath, brother!" and it extends an equal invitation to the student of science and the lover of imaginative literature. It lures the professor even as it lures the poet. The former writes in words that would not come to one whose thoughts were of mechanism only:

When in summer we lie down in the thin, dry upland grasses there is the gentlest of whistling noises in our ears. The notes are so high because the grass stems are so thin.

But no explanation will prevent one in a certain mood from believing that the whisper of the wind can be translated into Christina Rossetti's "Passing away, passing away"; and some such thoughts must have been passing through the mind of the greatest of Victorian poets as he wrote:

When from the dry dark world the summer airs blow cool
On the oat-grass and the sword-grass, and the bulrush in the pool.

It is a dying girl into whose mouth the lines are put, and they repeat the oft-told tale of the vividness with which familiar scenes revive in the mind when the order to leave them has been given in tones that brook no disobedience.

THE SONG OF THE POPLAR LEAVES.

Another passage one would like to annotate—if this is not too important a word for a little informal chat—is the following:

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In Tennyson's "Princess" is a reference to the poplar, which shows that the poet's observation could not have been closer or more exact if he had been a professor himself:

I stood and seem'd to hear,
As in a poplar grove when a light wind wakes
A lisping of the innumerable leaf and dies,
Each hissing in his neighbour's ear.

There are few things about poplar leaves sweeter or more appropriate than that written by Miss Butchart in "Songs of a

Day." It is as fine as her praise of the "frail minstrels of the moor and fell," and it could not be finer.

But far above the flowers a-swoon,
And far above the silent sheaves,
From pallid dawn to languid noon,
The poplar trees are whispering low
To little secret winds that blow
Among their murmuring leaves.
The poplar trees are singing, throughout the sultry hours—
Songs the cherished garden flowers
Will never, never know;
Songs the blessed harvest field will never, never know—
Are singing to the little winds that flutter to and fro.

THE SIGHING OF THE PINES.

In a brief sentence Professor Bragg explains a noise of the wind that never fails to impress the poetic mind. He says: The thin stems of the pine needles break the wind into whirls succeeding one another with great frequency and the sound is high pitched but soft. It used to bring tears into the eyes of Sir Walter Scott, and it inspired George Meredith to write his solemn "Dirge in Woods":

A wind sways the pines,
And below
Not a breath of wild air;
Still as the mosses that glow
On the flooring and over the lines
Of the roots here and there.
The pine-tree drops its dead;
They are quiet, as under the sea.
Overhead, overhead
Rushes life in a race
As the clouds the clouds chase;
And we go,
And we drop like the fruits of the tree,
Even we,
Even so.

THE PATHETIC FALLACY.

Neither Meredith or any other poet quoted here was, or is, deaf to what Ruskin called "the pathetic fallacy," the fond belief that Nature is in any way responsive to the mood of man. Sun, wind and wave neither smile nor frown at good fortune or bad. It is "fancy all" to assume anything else. Meredith states the real case in "The Song in the Songless":

They have no song the sedges dry
And still they sing.
It is within my breast they sing.
As they pass by.
Within my breast, they touch a string
They wake a sigh.
There is but sound of sedges dry
With me they sing.

This had been said long before, and in more impressive language, by Coleridge :

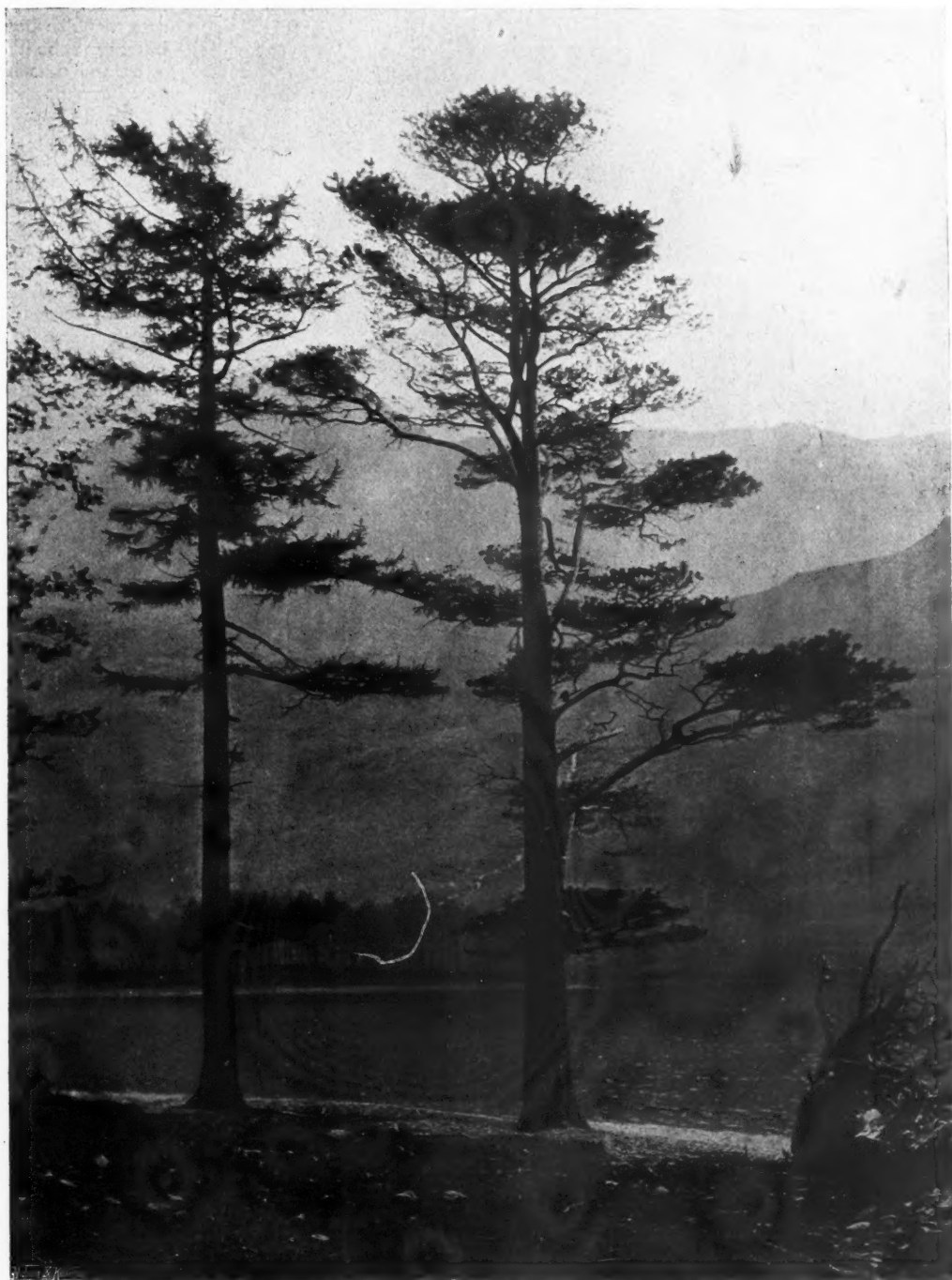
We receive but what we give
And in our life alone does Nature live :
Ours is her wedding garment, ours her shroud.

Yet in spite of all that science teaches and logic enforces on our understanding, there remains potency as well as magic in the sounds of Nature. They entered into the very soul of Scott, so that the most delicious sound to his dying ear was that of the Tweed rippling over its bed of gravel as it flowed past Abbotsford. Who would venture to deny that Wordsworth's prophecy for his "Dear child of nature" has behind it a far-reaching truth ?

Beauty born of murmuring sound
Shall pass into her face.

"Beauty born of murmuring sound" can only be a spiritual beauty. The word "spirit" itself means a breathing, and the phrase "the breath of life" is employed to denote the first essential of existence. When we want to explain what is necessary to the satisfaction and development of any human being we use the same phrase proverbially. It was "the very breath of life" to him or to her. In the New Testament it is told that the Holy

Spirit descended like "a rushing mighty wind," and who can wonder that the softest and tenderest of all sounds, the wind breathing gently through green foliage, has by sympathy and imagination been likened to the breathing of the life-spirit ? Wordsworth, who could yet be the prosiest and most matter of fact of men, in his inspired moments soared into realms explored only by the choicest minds of any age. He must have often in his solitary wanderings among the Westmorland hills, those hills of which he writes "the winds come to me from the fields of sleep," listened to all those murmuring sounds which fall so sweetly on the poet's ear. He, like his own poet in russet mantle clad, "murmured to the running brooks a music sweeter than their own." Brooding on the connection between these sounds and the spiritual life he carried thought to the farthest extremity on which it could be borne by the wings of sympathy. In the pursuit of knowledge this would be a drawback. Imagination vivifies all things, but it also glorifies and conceals and sometimes misleads. In the investigation of fact it must, to a large extent, be suppressed. Coldly, deliberately and with unbiassed mind the data have to be set forth and the conclusion drawn. It is when this has been done that imagination works to most purpose on the results. The *Vita vitalis* of the Latin poem can only be achieved by union of knowledge and imagination. P. A. G.



NOTES ON YOUNG BITTERNS.—I

WRITTEN AND ILLUSTRATED BY MISS E. L. TURNER.

[Considerable interest was aroused among ornithologists in 1911 by Miss Turner's discovery that the bittern (*Botaurus stellaris*), long considered extinct as a British breeding species, had returned to the Fenland and bred there. The story of her exciting search for the nest and young has already been told in these pages. Miss Turner has since made a particular study of the habits of bitterns in various places; the results are given in the following notes.—Ed.]

BIRD photographers are constantly being told—mostly by collectors—that they add nothing new to science.

This may, or may not, be true; it does not matter. What really concerns the bird photographer, if he is worth his salt, is the stimulating of public opinion. No one can deny that the pioneers of bird photography—men like the Kearton brothers and others—have done more for the protection of birds than mere legislation or even private enterprise. Bird protection laws are ineffective and futile. This is partly owing to the fact that these laws are engineered by the wrong people, and partly because of the many conflicting interests. All kinds of people want safeguarding—game preservers, sportsmen, collectors, anglers, mere sentimentalists, agriculturists, and that curiously invertebrate animal, the collector turned protector.

Meanwhile, the photographer plods on, trying to convince the public that "A bird in a bush is worth two in the hand." The public is becoming more and more genuinely interested in birds. It likes to know the details of their home life and the workings of their tiny minds. It is only by educating public opinion that our heritage of birds can be ultimately preserved. Birds are a part of that "great entail" which Ruskin says "God has given us for our life." Our forefathers wasted this inheritance shockingly. We have



A TYPICAL NESTING SITE.

covered up their sins by attributing the loss of certain birds to natural causes when really this was the result of their selfishness. We are trying now to build up our inheritance again, and sometimes we are up against enormous odds.

The bittern has returned to us, and, in spite of the fact that numbers are shot every year, it is holding its own. Its presence in any area unfortunately cannot be kept secret. The booming of the bittern may be heard two miles away, and thus he is often his own betrayer.

Yet, after all, man is only one of the enemies of birds. In some places, of course, he does not count at all either one way or the other. No amount of protection, and no money, can render birds immune from disaster. Heat, cold, floods, vermin and birds of prey—these are some of the agents which decimate bird life, especially during the nesting season. All Nature cares about is that each species should produce one surviving pair during its lifetime. The rest may go to the wall for aught she cares.

My first bittern hunt was in July, 1911. It resulted in the capture of one nearly fledged bird. It is curious how, in moments of supreme excitement, the mind is often occupied with something extraneous or even trivial. After the lapse of nearly nine years, the outstanding feature of that strenuous hunt is regret at the ruthless tearing from their anchorage of innumerable spikes of



TWENTY-FOUR HOURS OLD.



WITH LARGE BLUE EYES AND GREAT SPLAY FEET.

golden bladder-wort (*Utricularia*). The surface of the water was carpeted with them; it was one of their inviolable sanctuaries. The reed beds were full of lush growth, and as twilight deepened they seemed full of mystery, like some primeval forest. Yet even in the dusk, while stumbling blindly through the dense tangle, and clasping that young bittern as close as his vindictive temper allowed, regret for the uprooting of the beautiful flowers was uppermost in my mind.

Subsequent huntings after bitterns have taken place earlier in the year when the reed beds were still wrapped in the grey gold of their old age. It is then that the bittern builds her nest and lays the first eggs; nest, eggs and reed beds are all in complete harmony. A month later, when the strange, prehistoric-looking young bittern emerges from the delicately tinted egg, there is new life stirring also in the reeds. Tender green spathes of reed and gladden are shooting up from the dark water or ooze, and these form a screen of colour

round the bittern's nursery. But again, all is in complete harmony.

The nestling bittern is the quaintest little bird imaginable. When hatched he is almost three inches high, and his clothing consists of a filmy garment of golden brown down. This covering is of the flimsiest description. The bird's head consists of two large blue eyes surrounded by a burnished halo of down. This down is almost an inch long; it is very fine in texture and blows all over his face in a high wind. It does not form a complete covering, but follows the line of the feather tracts. In a day or two the quills begin to sprout, but the down still surrounds him like a mist. The long, thick, ungainly legs and great splay feet, supporting a curiously attenuated body, are redeemed from ugliness by their brilliant colouring. His feet seem several sizes too large for him. After a week or so the colour of the down changes to a marabou brown and the iris takes on a greenish tinge. The legs, bill and all the bare patches



YOUTHFUL CURIOSITY: THUMB SHOWING ON MIDDLE BIRD.



RESIGNATION.

of skin are a uniform blue-green. In certain lights this colouring is iridescent; the tiny bittern is thus completely camouflaged. These soft browns and blue-greens harmonise completely with the dull sheaths of the young reeds themselves, and the body colouring is like sunlight filtered through green reeds.

When only a few days old, bitterns regard the intruder with youthful curiosity and interest. The elder ones stand up, supporting themselves by extending the "hand" and "thumb" and pressing against the reeds. The nestlings in the last photograph were the youngest complete family I have ever seen. The nest was placed in sedge on a fairly dry marsh, and contained the unusual number of six eggs, five of which hatched. As I approached on this occasion the female was just flying away in search of food. The smallest nestling was still wrestling

with several inches of eel, the tail of which hung out of his beak. He made great efforts to swallow the loose end before taking cover beneath his brethren.

Three days later, however, all five were strong enough to leave the nest. They made a bee line for cover as soon as I approached. It is a ludicrous sight this, and one's first impulse is to stand and laugh at them. They stride away in a dignified manner, in order of seniority and consequently of size. The pace at which they travel is astounding. No single person can cope with them. They require a guard of at least two people to prevent their escape from the photographer. Unless you mark down each bird as it slips off the nest it will take you ages to round them up, for they absolutely melt into their surroundings when only a few feet from the nest. This is the case,



AN INDISTINGUISHABLE MASS OF BROWN DOWN.

not only in the earlier stages of their growth but throughout their youthful career. Nature and inherited instinct have taught them how to hide. When only a few days old they begin to ape the wiles and attitudes of the adult, thrusting their bills upwards and trying to draw their bodies up into the resemblance of a bunch of reeds. However, when finally collected and put back into the nest, they settle

down resignedly for a few minutes, during which time the photographer has to do his best while he can. They tend to bunch themselves up into an indistinguishable mass of brown down. If you try to arrange them they show resentment, for they can be very pugnacious and, when half grown, quite formidable. If, in a fit of carelessness, you bend down over an innocent looking crouching bittern, immediately the strong, sharp bill is thrust upwards with lightning rapidity, and woe betide you if it strikes your eye.

Sometimes the youngest bird in a brood of four or five comes to grief early in its career. It is very fond of seeking shelter beneath the older nestlings and must sometimes get trampled under foot. Moreover, the firstborn is aggressive and greedy, and may absorb more food than is his by right. Whatever may be the cause, it is seldom that the whole brood is successfully reared. But this is often the case among birds (such as hawks and owls), which begin to incubate as soon as the first egg is laid. Nature has no pity for the weak, and if the babe cannot defend itself its doom is certain.

Like all birds, bitterns have, of course, their natural enemies. I have seen the old bittern spend hours trying to



UNUSUAL NESTING SITE (AMONG SEDGE) AND SIX EGGS.

and hurls herself on the marauder, turning and twisting as rapidly as a lapwing. Sometimes the antagonists are so close together that it is difficult to distinguish between the two whirling masses of feathers. The bittern is never satisfied with driving off the enemy; she follows him for a long distance. I have watched both pursuer and pursued until both were mere specks on the horizon. By and by the bittern returns, and once more she is apparently the indolent aristocrat.

I have occasionally seen bitterns fighting among themselves, but as a rule they live very peaceably together. Sometimes they nest in close proximity, but when this is the case, they hardly ever resort to the same spot in search of food. The distance of the feeding ground from the nesting area depends largely upon the height of the water on the marshes. A partially silted up ditch screened with reeds, or a sloppy pool well hidden from view, these are favourite hunting places for such food as the young bitterns require. Here small fish, including eels, and frogs are easily picked up. Should the water rise five or six inches or, on the other hand, if the ground becomes too dry, then the bittern finds another suitable spot elsewhere.

drive off birds of prey, and, for the time being, always succeeding. These fights are very interesting to watch. The bittern tries to thrust up at its enemy from below. Her object seems to be to impale the enemy upon her long, sharp bill. Usually a flying bittern is the embodiment of leisured ease, but when roused in defence of her young, she becomes a perfect fury. She rises like a rocket from the reeds



THREE TO EIGHT DAYS OLD; THE YOUNGEST BIRD, SUPPORTING HIMSELF ON HIS EXTENDED "HANDS," IS SWALLOWING AN EEL.



THE Newports were a very important Shropshire family under Elizabeth and the Stuarts. The surname came, no doubt, from the town of Newport in the east of the county. But as early as 1391 we find Thomas Newport enfeoffed in the manor of High Erccall, lying between Newport and Shrewsbury, while marriage gave, to a sixteenth century descendant, Eyton-on-Severn lying in the parish of Wroxeter, where still stand remains of the Roman station of Uriconium.

Beginning with the Civil Wars of Charles I's time, destruction and decay have fallen heavily on both the Newport homes, which to-day are farm houses. But they still possess features that remind us of their great days and of the local magnates who owned them and lie richly entombed in the chancel of Wroxeter Church.

The terrace at Eyton, ending against the road with the surviving two-storeyed garden house (Fig. 5), stands at the edge of a brow where it begins to fall south towards the Severn. It looks across the river to the stately Queen Anne house of Cound, and in the distance Caradoc and the Stretton

Hills close the view. The old house, much earlier in date than this terrace, lay below it, and only a summer drought parching the meadow grass tells us where it stood by revealing the lines of its foundations. The manor was one of those with which Roger of Montgomery endowed the great abbey which he founded at Shrewsbury in 1083. It became a country house of the Abbots, and in 1506 the Shrewsbury town clerk charged 8d. for riding to see the Abbot at Abbot Eyton, as it was then called. Thirty-four years later the King's commissioners received the surrender of the abbey, and we saw last week how their home lands of the Abbey Foregate, after passing through various hands, came in large measure to Richard Prince under Elizabeth. To Eyton came an immediate and final change of ownership, for at the Dissolution it was purchased from the Crown by one of the lawyers who enjoyed the favour of Henry VIII.

There were Bromleys of Bromley in Staffordshire as early as the days of King John, but in the fifteenth century we find one, Roger Bromley, settled at Mitley in Shropshire, whose descendants, while keeping up their connection with Shropshire and its county town, carried off great prizes in the law. Descended from Roger's elder son was a Lord Chancellor and a Chief Justice of Chester under Elizabeth and a Baron of the Exchequer under James I. Roger's younger son had a son Thomas, who was reader of the Inner Temple in 1532 and a justice of the King's Bench in 1544. Before that he had money to invest in land, for he was the purchaser of the Eyton Manor, where he established himself in the Abbot's house without making great changes, so far as we know. His professional duties will have kept him mostly in London, and so highly did King Hal value him that he made him an executor and left him £300 by his will. Thus he was of the governing body under the boy Edward; but, attending to the law and not to politics, he avoided the pitfalls of high ambition which brought Seymour and Dudley to the scaffold, and Mary made him Chief Justice of the Common Pleas on her accession. Yet he found time for his country seat and the concerns of the important commercial and administrative town that lay a few miles north-west of it. Thus, under date 1553-4, the Shrewsbury chronicler sets down:

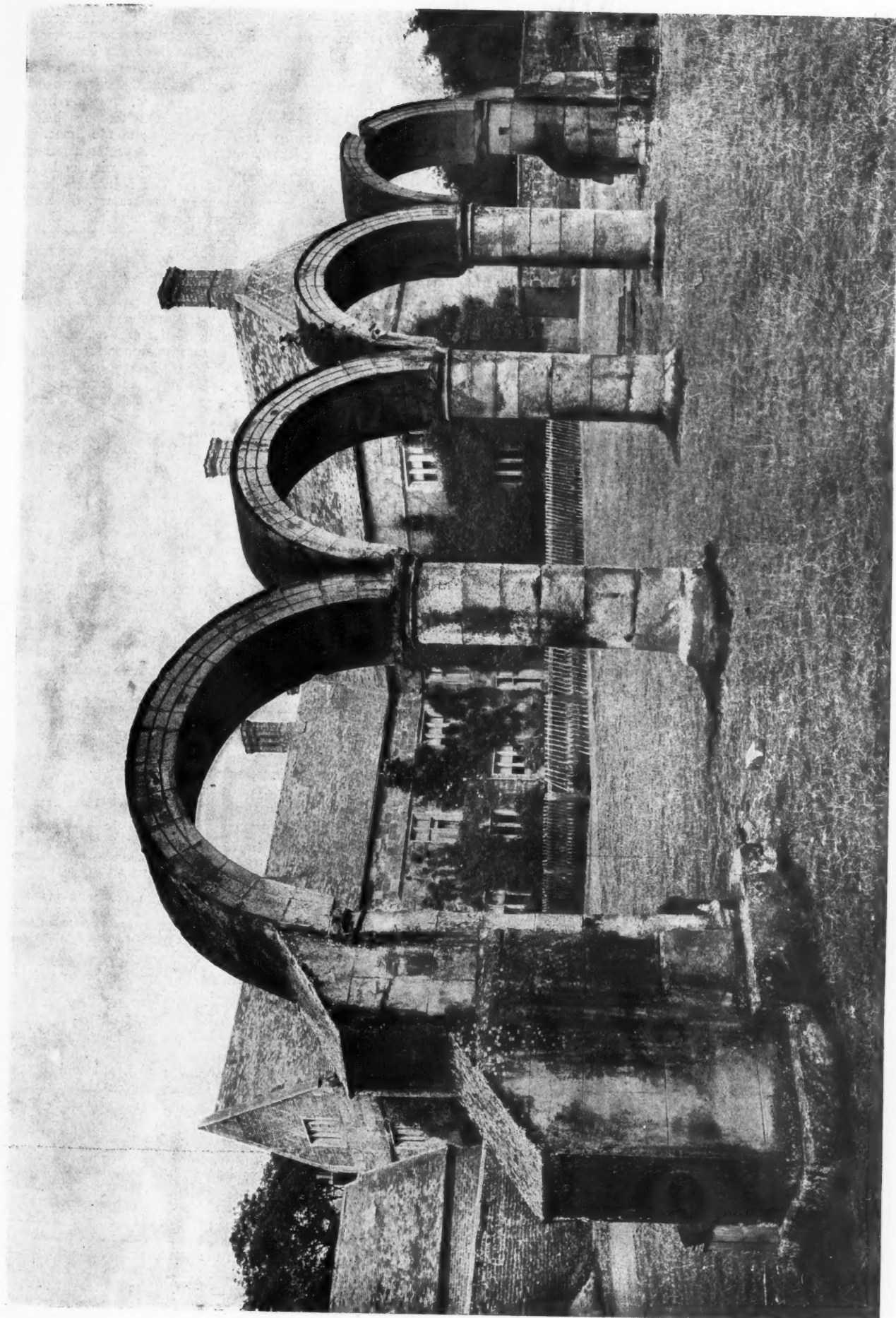
Thys yere disceassyd one Sr Thomas Bromleye of Shrewsbury beinge Chyffe Judge of England and Alderman of the sayde towne of Shrewsbury and free wth the Company of the Drapers there.

The entry appears to be predated, for the date of the appointment of Sir Thomas's



Copyright. 1.—HIGH ERCALL: EAST GABLES AND CHURCH TOWER.

"C.L."



Copyright.

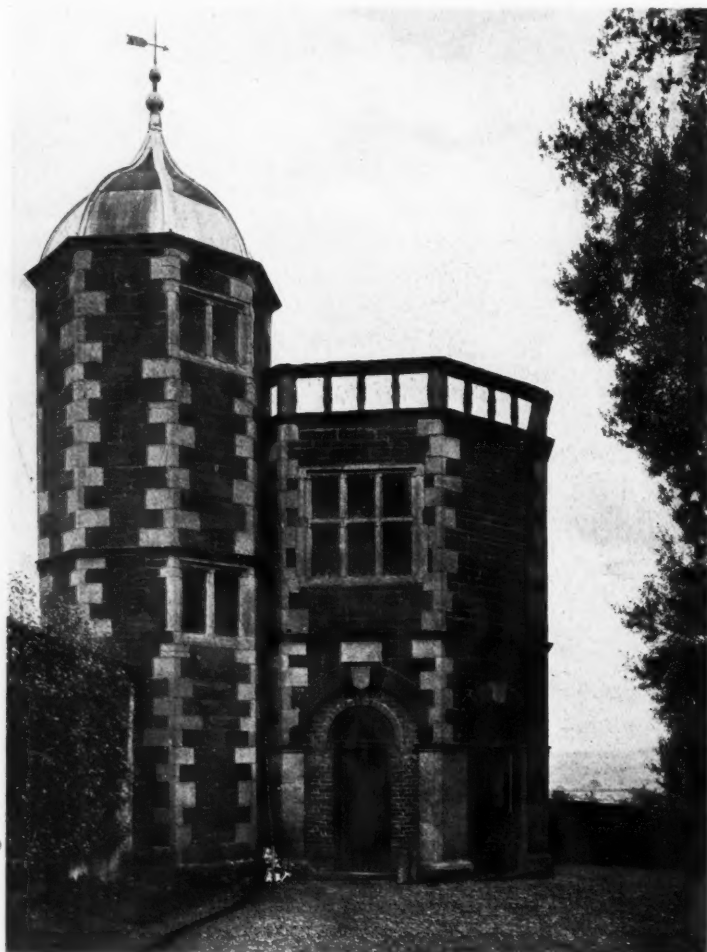
2.—HIGH ERCALL : THE ARCADE.

Probably the remains of a loggia on the south side of what was once a quadrangular house.

"COUNTRY LIFE."



3.—EYTON-ON-SEVERN: THE GARDEN HOUSE FROM THE ROAD.
The Stretton Hills are seen in the distance.



4.—EYTON-ON-SEVERN: THE GARDEN HOUSE FROM THE TERRACE.

successor is 1555 and that is given as the year of his death and of the succession to Eyton of Sir Richard Newport, husband to Margaret Bromley, the Judge's only child. She it was who will have erected to the memory of her parents a great altar tomb (Fig. 9) against the north wall of the chancel of Wroxeter church, whereon Sir Thomas and his wife lie sculptured in alabaster. The sculptor was worthy of his task, and his fine work is, by good luck, admirably preserved, hands and features being wholly unchipped. The colouring of the draperies gives the effect of pale flesh tints to the alabaster of the faces, which are full of expression and yet restful. By the side of the Chief Justice's head (Fig. 8) stands on one foot a cock pheasant, the crest of the Bromleys of Bromley, while by his feet is the lion's gamb, which distinguished the Shropshire branch of the family. This is also freely scattered on the tomb, as in the spandrels of the cartouches that encircle the arms and flank the figure of the only child and heiress, who is herself much better supported by offspring where she lies with Sir Richard on the other side of the chancel (Fig. 10). For this tomb also she must be responsible, setting it up after her husband's death in 1570, as it gives that date but leaves a blank space for the later insertion of her own demise. That we know from the Shrewsbury chronicler, who, under date 1598, tells us:

This yeare Lady Margaret Newport of Eyton and in the County of Salop widowe dep'tid this present lyfe the xjth daye of August A^o.p.d. and was buried at Rockcetter the next day followinge beinge hir will so, and the xxixth day of August all the bells in Shreusburry dyd ringe in remembrance of hyr the whiche towne she lovyd well and she was beloved of the inhabytants therein: there was bestowyde uppon the poore that day xxli besyds many other places in the coontery verely amply: she was a vertuous lady in all hyr lyfe tyme and verely good to the poore in towne and coontrey.

Twenty-eight years earlier the same authority informs us that "Syr Rychard Newport a valiant knyght of Shropshire and of a pryncely personage dysceassyd for whose deathe there was mutche mone made in Shrosberye." The inscription on the tomb tells us that he was a member of the Council of the Marches. He was succeeded at High Erccall by his son Francis, of whom the Shrewsbury chronicler relates that on the day of the January Quarter Sessions, 1588

there had licke to have been greate hurt doone throughe the blowinge of a troompett by Master Frances Newpards troompetar over against Master David Lloyds howse in whose howse was one Master Owen Vagha' & his meen beinge a stoute gentil' betweene whom was an olde grudge, the w^{ch} troompetoor beinge founde faultt wthall drewe out his sward to stricke at the p'tie and thereupon the oder hys fellows drewe and the bayliffes beinge in the hall cam amongst them to keepe peace were not regardid uppon the same, the common bell was ronge the' the townesmen assisted the bayliffs and the' they were forcid to put upp their weapons wth falfte a doss'n broke pates and all this broile the say'd Mr. Owne Vagha' and all his men kept the howse and by counsell storred not wth yf he and his men was coom furthe there had been a bloddie daye but God be thanckid it was for that tyme pacified.

Yet Francis Newport was himself no swashbuckler, but much devoted to the arts of peace. To him we mostly owe what remains of Erccall and Eyton and, as we saw at Condoover, he was the architectural adviser of his day, patron and employer of Walter Hancock, the "skilful man in the arts of masonry in settinge of plottes in buildings and performing the same," the architect of Condoover and other Shropshire houses. He, however, died in 1799, and much of Francis Newport's work at Erccall and at Eyton must be subsequent to that date. On the central gable of the east side of Erccall (Fig. 12) is a tablet that tells us that he commenced and carried through the work, and it is not quite clear whether the date 1608 applies to the beginning or the end of the operations. The house, such as we see it now, is built partly of sandstone and partly of brick. This may be because the stone, coming from the ruins of the neighbouring Abbey of Haughmond, fell short, or the brick, which we find principally on the east side, may imply a rebuilding and enlargement of a somewhat older building. Yet

the chamfered section of the stone window mullions and the burnt end diapering of the brick walling are not usual under James I, and, but for the clearly specified date on the tablet, would have been set down as considerably earlier. The same mixture of stone and brick, the same diapering of the latter, the same section of window mullioning are found at Eyton, where the surviving garden house has stone for its south and west sides (Fig. 4), but brick to the north and east (Fig. 3). This probably dates from after Margaret Newport's death in 1598; although it is possible that within her lifetime her son built a terrace, with garden houses at each end connected by a high wall, and situate higher than and quite independent of the Abbot's house which was kept by Judge Bromley as his residence. The surviving garden house has had its three open, south-facing arches filled in, and also its doorway towards the east. Otherwise it is untouched and a very good specimen of such a feature. Itself an octagon, a smaller octagon is set against one of its sides and contains a newel stair of oak leading from the downstairs loggia to an enclosed upper chamber with three windows, a fireplace and a doorway occupying five out of the eight sides. The newel stair proceeds upwards, is roofed with a lead cupola and leads on to a lead flat, from which the view of the Stretton Hills may be enjoyed. Through the open door (Fig. 6) the great central oak post of the stair, moulded in an unusual manner, is visible.

The destruction of the old house and the transformation of the building at the west end of the terrace into a habitation, now a quite modern looking, but ample farm house, makes it impossible to decide whether Francis Newport ever went beyond terrace making at his mother's home. His paternal inheritance was certainly his own and his son's chief residence. Here again a large measure of destruction prevents a full understanding of the original extent and disposition. We know that it ran round a court, was moated, walled and entered over a draw-bridge. We must surmise that the remaining isolated arcade (Fig. 2) was a loggia occupying the centre of the south side of the quadrangle, as at Condover, Hatfield and other late Elizabethan and Jacobean houses. The similarity of detail in this arcading and those at Condover and Shrewsbury Market House lead to the inference that all three are Hancock's work. There is neither architecture nor document that permits of greater precision and detail in describing what remains of a house of such importance and strength that it stood a siege in 1644. Long before that Francis had been succeeded by his elder son Richard. Clarendon, in his history, describes the latter as "of the very best estate of any gentleman" in Shropshire and adds that he was "a very prudent man." All this prudence was called into requisition, and even then proved ineffective when Charles and his Parliament determined to settle their differences by the arbitrament of the sword in 1642. Then it was that Charles raised his standard at Nottingham and soon after came to Shrewsbury. There he finds parties somewhat evenly balanced. He needs support both in men and money, the latter most particularly. Sir Richard is anxious not to declare himself and not to part with his money. He urges that, owing to his commanding position in the county, he would be most useful as a neutral and a mediator. His son Francis, who, as a member of the Long Parliament, has shown his pronounced royalism by voting against the attainder of Strafford, has the eagerness of youth, and is ready to take part in the fray on the King's side. He hints that his father would very likely be induced to part with his cash "if he might be made a Baron." The King exclaims "about making merchandise of honour," but the emptiness of his exchequer overcomes his scruples; and so Sir Richard becomes Baron Newport and £6,000 passes into the royal coffer. Neutrality is no longer possible, and, though we do not hear of him in the field, the new peer followed the fortunes of Charles, and when these grew dark, he passed over sea where he died in 1651. Meanwhile sad times had fallen upon High Ercall. So soon as the clash of arms began, its owner handed it over to the

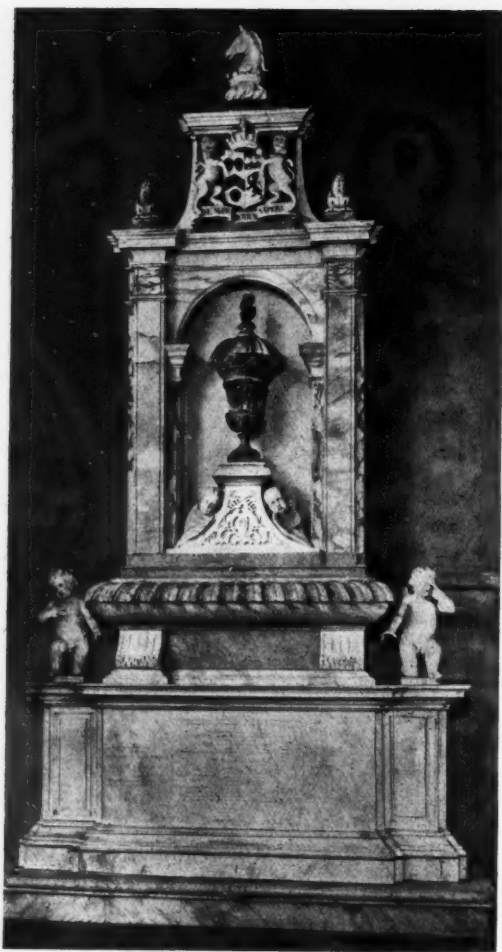


5.—EYTON-ON-SEVERN: THE SOUTH-EAST SIDES OF THE GARDEN HOUSE.

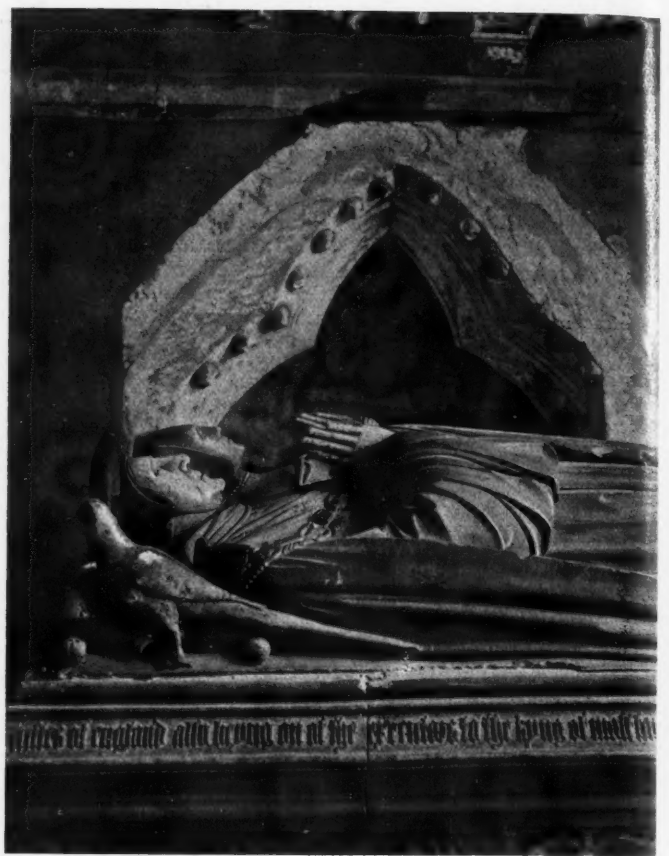


6.—EYTON-ON-SEVERN: ROOF AND CUPOLA OF THE GARDEN HOUSE.

The moulded oak central post of the newel stair is seen through the open door.



7.—WROXETER CHURCH: TOMB OF FRANCIS NEWPORT, EARL OF BRADFORD.



8.—WROXETER CHURCH: DETAIL OF THE BROMLEY TOMB.

Showing the pheasant crest by the side of the Chief Justice's head.



Copyright 9.—WROXETER CHURCH: TOMB OF CHIEF JUSTICE BROMLEY AND HIS WIFE. "COUNTRY LIFE."



Copyright. 10.—WROXETER CHURCH: TOMB OF SIR RICHARD NEWPORT AND HIS WIFE, HEIRESS "C.L." TO THE CHIEF JUSTICE.

Shropshire royalists for a garrison "owing to its size and capability for defence, being well moated." Against local attack it would well defend itself, and so resisted till a large force equipped with artillery could be brought against it, when it was taken and sacked, as Lord Newport records in his will: "By the malignity of the recent times my chief house High Ercall is ruined, my household stuffs and stocke sold from me, for having assisted the King." In 1646 the Parliamentary Committee had imposed on him a fine of £16,687 13s. 3d., the highest on any Shropshire loyalist, being particularly incensed against him in that he had "placed a garrison in his own house at High Ercall and for a long time maintained it at his own cost, where divers of our men were wounded and slain." Finally the amount at which he and his son were allowed to compound was £10,000. The son's activities on the royal behalf soon came to an end. He was one of the leaders of the force that sought to capture Oswestry in 1644, but was itself overwhelmed by Middleton's army. Newport was taken prisoner, and only after six years' incarceration was he discharged on condition of his living with Lady Brooke at Hackney. But before long he was allowed back in his county, and in 1654 was implicated with his brother Andrew and others in a plot to seize Shrewsbury and found himself in the Tower of London. Once more at large, he was completing another plan to get possession of Shrewsbury when Monck's adhesion to the Restoration movement made further fighting unnecessary and Charles II appointed him Lord Lieutenant of Shropshire with large powers in 1660. Later on he was raised a step in the peerage and became a privy councillor and Treasurer of the Household. But he was opposed to James II's policy and was deprived by him of all offices. These were given back to him by William III and in 1694 he was created Earl of Bradford. Dying in 1708, he is commemorated as one who "militavit non inglorius" on behalf of King Charles, as we read on a marble monument (Fig. 7) to the right of the altar in Wroxeter Church. To the left of the altar lies his aunt Margaret, daughter of Sir Francis Newport, the builder. She married John Barker, her father's neighbour at Haughmond Abbey, and she died in 1618, aged 33, and we read that her husband "was

in good and perfect health when she died," but fell sick next day and seventeen days later also passed away (Fig. 11).

Richard, second Earl of Bradford, followed his father in the Lord Lieutenancy of the county, and had two sons, of whom the younger was a lunatic, while the elder, Henry, third Earl of



11.—WROXETER CHURCH: TOMB OF JOHN BARKER AND HIS WIFE, DAUGHTER OF SIR FRANCIS NEWPORT.



12.—HIGH ERCALL FROM THE NORTH-EAST.

Bradford, died in 1734, leaving no legitimate issue. Although "the Countess" is spoken of in family letters, he was unmarried, and the allusion was no doubt to Mrs. Anne Smyth, to whom and her assigns he left his possessions. Thus we read that William Pulteney, Earl of Bath, "acquired the vast estates of the Bradford family by devise under the will of the mistress of the Earl of Bradford."

High Ercall was never again a "chief house" after its "sighting" by the Parliamentarians, and the later history of Eyton-on-Severn is obscure. The present farm house at the west end of the terrace, despite modern cementing, incorporates old work, and from its west side starts an ancient avenue which frames a view of the distant spire of St. Mary's Church at

Shrewsbury. Here, and not at the now vanished Abbot's house, the Earls of Bradford sometimes may have resided. But they and their successor, Lord Bath, liked Shrewsbury town, where we shall hear of both Newport House and Bath House when, in a few weeks' time, we review its post-Restoration architecture.

From the Pulteneys the Newport estates passed to the Vanes. Lord Barnard, the present head of the family and owner of Raby Castle, is of the many who find scattered estates and innumerable acres unsatisfactory possessions under present conditions, and his Shropshire lands are now passing to new owners, occupiers in many cases, turning their tenancies into freeholds.

H. AVRAY TIPPING.

TO MY POCKET DIARY

Dear Pocket Diary, you will not
Fit any pocket I have got;
Besides Insurance, Cash Account,
Notes, Cab Fares, Charts, you are a fount
Of curiosity that loves
To know my size in boots, hats, gloves;
You badger me till I confess
My birthday and my home address;
I humour you by writing down
My height, my weight, my train to town.
But when it comes to being told
My "Daily Wants"—dear Diary, hold!
Perhaps I ought to think and pray
For both Archbishops every day,
Recall the Pope and meditate
Upon the Poet Laureate,
Give a brief, passing thought or two
To Leap Year, Scotland Yard, the Zoo;
But *can* I want, with every dawn,
To measure out a croquet lawn?
Or can I live (in any nice sense)
Needing a daily marriage licence?

Not often do I lie awake
Wondering what ten drachmas make,
And as for the Bermuda mail,
Once in a blue moon would avail.
Moreover, though a chest of tea
Would seldom come amiss to me,
Though coals and bricks and loads of hay
Would be to me as flowers in May,
And though I should indeed find handy
Hogsheads of sugar, beer and brandy,
Is it quite fair to make me dwell
On joys so inaccessible?
Read, then, and mark, dear Diary, here
My single daily want: next year
Curb your exuberance of fact,
And exercise a little tact.
Though Magna Charta was, forget it,
If Waterloo escapes you, let it;
Expunge above, curtail below,
Days—days are all you need to know;
Put padded pages to the knife,
And crowd no more my hour of life.

V. H. FRIEDLAENDER.

HAUGHMOND ABBEY

By H. AVRAY TIPPING.

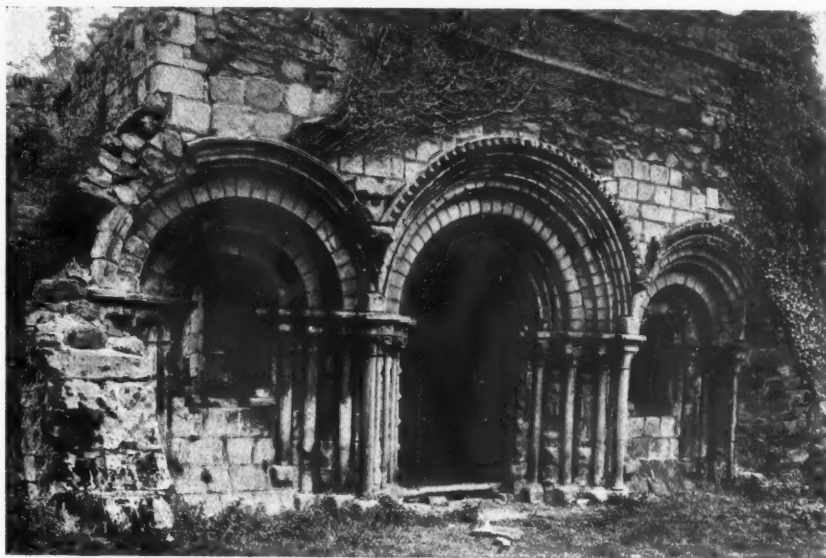
THE ruins of Haughmond Abbey lie to the left of the road that runs from Shrewsbury to High Ercall. After the Dissolution the buildings were altered to suit the residential needs of the lay owners, and we have just seen how neighbourhood led to a marriage between a Barker of Haughmond and a Newport of High Ercall. Like the latter place, the Abbey seems to have suffered in the Civil Wars, as we are told that a Captain Hosier then "burnt the house of Mr. Barker of Haughmond Abbey, near Shrewsbury, by setting fire to the Yule log." The male line of its owners appears to have ended at much the same date and we hear of it no more as a place of inhabitation.

The architecture of what remains offers good examples of various periods. The Abbey started as a home of Augustinian Canons in the twelfth century, and the south doorway into the church (Fig. 1) as also the fine triple arching of the chapter house front (Fig. 2) are excellent samples of a late phase of the Norman style. The infirmary hall was built in the fourteenth century, as we can judge from the tall two-light windows in its south wall (Fig. 5), while the abbot's lodging, lying east of it, retains the lower half of a fifteenth century two-storeyed bay (Fig. 3). At the time of its completion the Abbey had buildings running round two courts. On the north side of the north or cloister court rose the church, while the south was bounded by the frater or dining-hall. The chapter house stood in the centre of the east side, while a lavabo recess of two fine arches lay at the south end of the cloister west walk, which ended to the north with the church doorway, having, in the return next to it, a way into the cellarer's building. The kitchens, infirmary, abbot's lodging and undercroft to the Canons' dormer lined the outer court, all built of a warm coloured and enduring sandstone, found on the site, so that parts of the lower section of the church wall are formed by excavating.

Soon after the Dissolution, that is in September, 1541, the Abbey and its lands were granted to Sir Edward Littleton, who sold them to a wealthy London citizen of Shropshire origin. The Hills, of Court at Hill, in the south of the county, sent offshoots northwards, who were seated about Market Drayton and also at Hawkstone. At the beginning of the sixteenth century Thomas Hill of the latter place apprenticed his son Rowland to Sir Thomas Kitson, mercer, the builder of Hengrave. Young Hill prospered in trade as had done his master before him. He became Lord Mayor in 1549 and was possessed of great estate when he died a bachelor in 1561. The Haughmond property then passed to his sister, Elizabeth, wife to John Barker of Wollerton, and they are the owners who are believed to have converted the Abbey into a family seat. A beam and rafter ceiling of moulded oak (Fig. 4) belonging to a room using part of the chapter-house space is a survival of their work. It was their



Copyright 1.—THE SOUTH-WEST CORNER OF THE CLOISTER. "C.L." Showing the entrance into the nave of the church and the doorway into the cellarer's building.



2.—ENTRANCE TO THE LATE NORMAN CHAPTER-HOUSE.



3.—FIFTEENTH CENTURY BAY TO THE ABBOT'S LODGING. To the left is one of the four south windows of the infirmary hall.

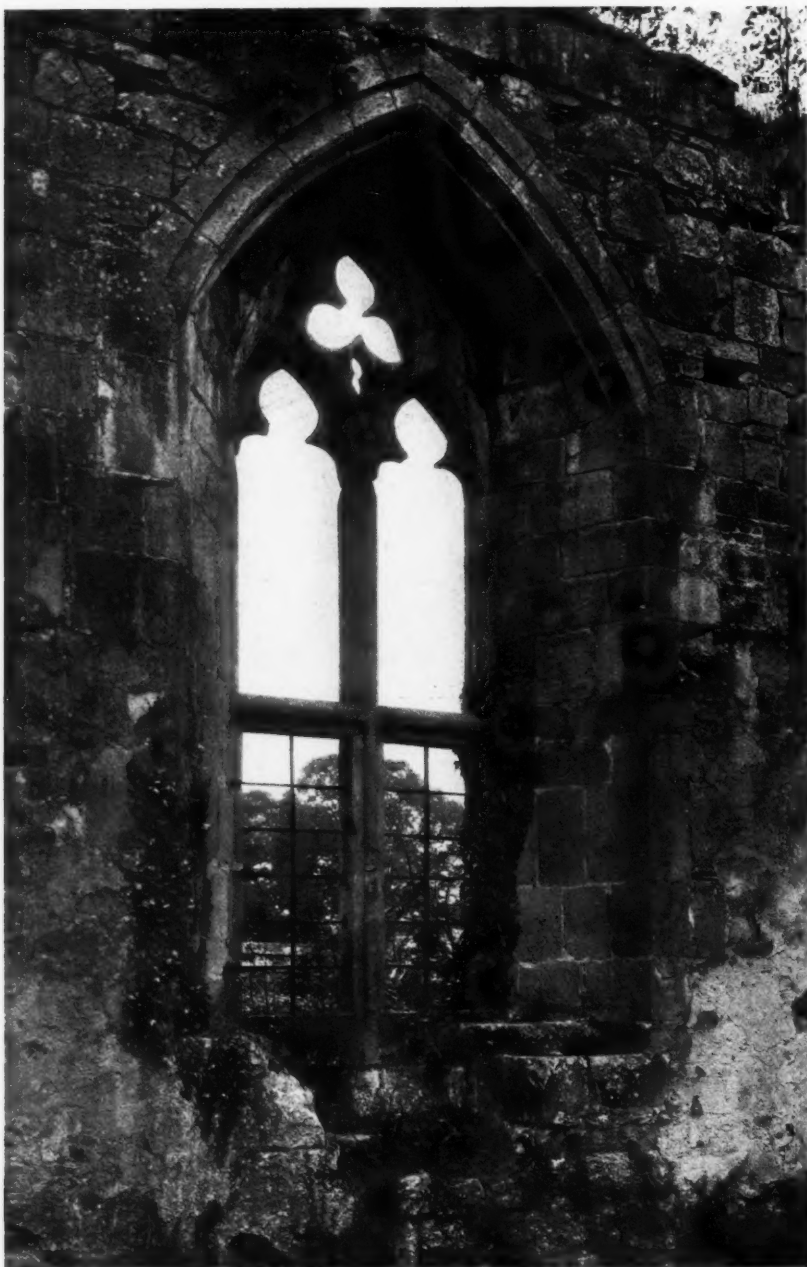


Copyright.

4.—OAK CEILING.

"COUNTRY LIFE."

Being part of the Elizabethan work of the Barker family.



5.—A WINDOW OF THE FOURTEENTH CENTURY INFIRMARY HALL FROM WITHIN.

great-grandson who married Sir Francis Newport's daughter, but there were no children of the match and a brother succeeded, who may have been in occupation when the traditional Yule log disaster took place. The property eventually passed to Kynastons and then to Corbets. In 1907 Mr. Hugh Corbet gave every facility to the late Sir William St. John Hope and Mr. Harold Brakspear to excavate and survey the ruins, so that a complete and accurate plan was made and was published together with an account of the Abbey in the volume of the 1908 transactions of the Shropshire Archaeological Society.

PIG-BREEDING FOR EX-SERVICE MEN.

MAY I make an appeal to the readers of your paper on behalf of the many young men, particularly ex-Service men, who for one reason or other are wishful to make their living, and their homes, on the land? Personally, I believe that agriculture in general should benefit to an enormous extent from the infusion of this new and energetic blood, untrammelled by precedent, prejudice and previous environment. These men's fresh, growing minds can bring to bear on farming new outlooks and new ideas which, grafted on to sound agricultural experience, should be good for all. The appeal I wish to make is that all farmers should try to find room for one or two of the many wanting practical experience. In particular would I address this suggestion to the breeder of pedigree pigs, because pig breeding is a branch of agriculture which seems to me essentially suited to the recruits, who will, in many cases, be limited both as to capital and previous experience on the land. For such pig-keeping is much the best branch of farming. Its main principles can be more quickly learned than can those of any other branch of farming, and in pig-keeping a good monetary turn-over (and therefore a good living) can be made more quickly than in any other branch of farming. On top of this I have proved that pig-keeping will enable one to produce more, year in and year out, per acre than will any other branch of farming.

I am training as many pupils or students as possible on my farms here, but the applications I get are far more than I can handle. It is this fact which prompts my suggesting that other farmers should do as I am doing. I make a nominal charge to cover the cost of the time spent by my staff in instruction. Assuming that the pupil has a month or six weeks to devote to the course, I split this time up into periods of from four to ten days. As briefly as possible, my programme is as follows:

First Week. Pupil appointed to a Herd Section.—By asking questions the pupil learns:

1. Scale of feeding, and reasons for it.
2. Life story of (a) boar and (b) sow.
3. Farrowing.
4. The points of the Large Black and Middle White pig, and how to tell a good pig of any age. This knowledge can be gained only by continually watching litters of all ages and studying individual points of various sows' progeny.

Second Week. Pupil appointed to another Herd Section.—This gives the pupil an opportunity to use knowledge gained during the first week, on quite another section of my herd, to make most useful comparison notes, and so check the soundness of his first week's study.

Four to Seven Days. Pupil appointed to Malt House Piggeries.—Here the pupil

sees the weaning, weighing and despatching phases of my system. As weaning pigs are continually changing, one must constantly be exercising one's judgment and knowledge in feeding to be sure that the weaners make steady daily improvement at this critical period.

Seven to Ten Days. Pupil Works with a Head Herdsman.—Seeing and practising such things as

1. Nose-ringing.
2. Ear-marking.
3. Gelding (by written permission only).
4. The general management—detail falling to a head herdsman responsible for a whole herd.

This is what I may call the complete curriculum or syllabus. When the pupil has digested it he is perfectly competent to care for his own nucleus of a herd, although obviously he can go on learning, and learning usefully, to the end of his life. But when he has completed my course, as briefly sketched above, he is safely entrusted with a small herd of growing pigs of his own.

A copy of my Farm Rules and Regulations (which must be implicitly observed by pupils) is handed to each student. I admit a continuous flow of strangers to my farms, some of whom, ignorant of what I may call conduct on the land, cause my staff a little trouble. They would *not* do so had they read my little

code of Rules and Regulations. But any trouble unwittingly caused by visitors is quite compensated by my pleasure in being able to give real help and information to earnest, keen students of pig-keeping, and I regard anything I can do to help ex-Service men as an absolute privilege, if not a national duty.

There is no knowledge or experience I have gained concerning either pedigree Scotch shorthorns, pedigree Jerseys, pedigree Shire horses, pedigree Southdown sheep, pedigree Large Black or Middle White pigs, or pedigree Sussex poultry which is not readily available to every serious student. *No question that I can answer will remain unanswered.* There are no "secrets"; one of the keys of my success with all my stock is the complete openness and simplicity of my methods.

It remains only for me to add that I shall be pleased to send a copy of my Farm Rules and Regulations to any farmer who feels prompted to do as I suggest and as I am doing. I am confident that farmers who undertake this procedure will themselves benefit. It is surprising to what an extent answering others' apparently very simple questions develops one's own reasoning powers, and I have yet to meet the student, or other visitor, who does not know as much about stock farming as I knew only ten years ago. Tendering you my thanks for the space accorded me.

S. F. EDGE.

GOAT-KEEPING by ALLOTMENT HOLDERS

AND THE CONSEQUENT INCREASE IN OUR MILK SUPPLY.

By WILLIAM SUGDEN.

OPPORTUNITIES for goat keeping were never more favourable than at the present time, and the prejudice against goats and goats' milk that has existed here in England should be broken for ever.

The final report of the Committee on the Production and Distribution of Milk, with Lord Astor as chairman, has made it very clear that the milk supply is rather uncertain, and that a complete settlement of the milk problem can only be effected by producer and consumer approaching the question in a proper spirit, and both recognising their obligation in this respect, and being willing to give way a little as a matter of duty to their country. According to your "Country Notes" of February 7th, the extract from the letter of one of the best dairy farmers

though the resignations from the Agricultural Commission, will as you state, have serious effects, and if one man (and he a true agricultural leader, such as the Minister of Agriculture), were made responsible, and saw to the proper working of his schemes and policies, it would be a great benefit to both consumer and producer. I think it would be a very great help to the milk question if only more goats were kept by our allotment holders, and more goats' milk used by the people of this country, and nothing but good would result from it.

QUALITY AND QUANTITY OF GOATS IN ENGLAND NOW.

A census of goats was taken ten years ago in most goat-keeping countries, and brought out the fact that there were over 20,000,000 in Europe alone. That was without the returns for England, Denmark, etc. This is estimated at well over a quarter of the world's stock. It is to be hoped that goat keeping and rearing in this country will be revived now that there is likely to be such a demand for milk, and that soon we shall see our waste lands and road sides alive with these hardy, useful and noble animals. If only the advice of our skilled goat-keepers was taken and care exercised when buying in getting the best breeds, much good would result and the people of England would benefit in consequence.

HOW AND WHERE GOATS WILL LIVE.

Now that allotment holders have got into full swing, money could be made by many of them if they started the goat-keeping

and goat-breeding business, for as consumers of waste, I think goats will take first place among animals, as nothing seems to come amiss to them, and a lot of waste refuse will be converted into milk. The small allotment holder who grows a good many foodstuffs and has a small run alongside where he keeps geese, ducks or hens, could certainly make a good investment by keeping goats. An existing outbuilding could easily be converted into a goat house, and, even if compelled to stall-feed them occasionally, they could be allowed the full use of the pen and will co-operate with the geese, etc., to a remarkable extent, and get all the exercise they require from the use of the small run. The goat will live and produce milk on pastures that would not support any other stocks, and is the hardest of animals. In parts of Australia goats will give milk in periods of



THE ALLOTMENT GOATHOUSE.

in England shows that the milk question is likely to be an eye-opener to the public in a year or two. As he states, the present surplus of milk is entirely fictitious and arises because people are not going to pay the price, and are consequently using less. They do not seem to realise that the farmer is having to pay three or four times what he paid before the War for a good many of the feeding stuffs he needs for his cattle, and therefore cannot be expected to sell the milk quite at the same price as in 1914.

If the people continue to take short quantities it must certainly end in the farmers killing more of their cows and calves, and so reducing their milk supply. As the dairy farmer says; there is bound to be a great shortage of cows for the next three years. It looks as

drought, when you would wonder how they could exist at all, for cattle and sheep would certainly perish if kept in their way in the same district. That goats will live and thrive on practically nothing is plainly proved by the use made of them in the mountain forests of California, where hundreds are being used to prevent the spread of forest fires. Large paths have been cut in the forest of sufficient width to prevent the wind-blown flames reaching across, but these spaces soon fill up with undergrowth, and so become useless, as the flames are helped over as soon as this undergrowth is well grown. In the centre of these roads a wire is strung, and on this wire runs a ring to which the goats are fastened. Along this the goats may then roam the whole length of the wire, but only away from it as far as the width of the paths, so that they can graze on the brushwood and undergrowth, and so prevent the spread of the forest fires. The forest rangers have a right to the milk, and are at liberty to sell what they do not require.

INCENTIVES TO GOAT KEEPING.

For many years there has seemed to be a prejudice against goats' milk, but I think that is now wearing away, and people are finding out that if something is specially recommended

by our most learned doctors for infants and invalids it will certainly not be harmful to the general public. If a large number of goats were reared by our allotment holders, it would relieve to some extent the milk situation for the next few years.

A splendid incentive has been given to goat keeping by a good many prominent dogmen and women, who are great



GEESSE NOT ADMITTED.

admirers of the goat. These include the Duchess of Newcastle, Lady Bathurst, Baroness Burton, Lady Handley Spicer, Sir Humphrey de Trafford, the Hon. A. Holland-Hibbert, and many others, and the interest they have shown in the goat breeding and goat keeping business is greatly appreciated by goat keepers generally. They demand stock of the right sort, and if only the right breeds can be got, the goat keeping industry will be made the finest in the world. By right stock is not meant all the prize breeds for show purposes, but good breeds as far as the build and milk supply is concerned.

WHAT GOATS WILL DO AND THE USES THAT MAY BE MADE OF THEM.

The goat is one of the most harmless and lovable animals in existence if it is treated at all respectfully. Proof is given of this by the delight the children have in playing with them. The goats are quite willing to play with them and will stand more rough usage than any of our smaller animals. They can be harnessed, and will draw the children about in their small wagons the whole day long, and although some of them have rather powerful horns, will only use them in self-defence. They are one of the hardiest breeds of animals on the earth, for they are to be found in hot or cold countries all over the world and are the true friends of the peasants in many countries. In Switzerland, for example, they will live on the mountain tops, and are friends in need to the shepherd, will help him in many ways, and are greatly appreciated by him.

Stories have been told by officers on the battlefields of the services the goats have rendered to them, and one told of a poor Frenchwoman who came into his hut and implored him with tears in her eyes to take charge of her goat as they had just got notice that they had to flee, and she had not room for it, for their necessities packed up the cart, and she did not want it to fall into the enemy's hands. He agreed to take it,

and it was kept by the soldiers, regularly milked, and remained with the company, travelling with them in their advances and retreats; and taking an active part in their labours. It would be nibbling away as contentedly as anything while German shells whistled overhead, and became truly one of them. After it had been with them through many of the critical months of the war peace came and with it the time for the regiment to return to England, and it was found that the poor goat would have to be left there after accompanying them for so long. The officer was trying to get someone there to take charge of it, and it is hoped he was successful.



NOT EXACTLY THE NATIVE ROCK.

THE USE OF EXPLOSIVES IN AGRICULTURE

THE article under the above heading which appeared in the issue of COUNTRY LIFE dated January 31st, 1920, has resulted in a number of points being raised by various correspondents, and several ask the question: "How can explosives be obtained?" The answer to this is, of course, fairly simple, as there are several well-known firms manufacturing or dealing in explosives who would be ready to supply, but the question appears to suggest that these correspondents contemplate operating with explosives themselves, and if this be so, a word of warning would appear desirable, assuming that some of these intending users may be unacquainted with the handling of high explosives. It is essential not to forget the nature of explosives, but to remember that, like Army mules, they can only be handled with comparative safety when certain rules are thoroughly understood and observed. There is a very formidable list of precautions to be observed with regard to explosives, but only a few need be mentioned here. Persons handling explosives should never smoke, stand near an open light, or carry loose matches. Always store explosives in a suitable, dry place, under lock and key, and where cattle, children or irresponsible persons cannot get at them. (Local authorities have certain powers in connection with the storage of explosives, and it is necessary to comply with regulations). Detonators must not be kept with or near other explosives. Nitro-glycerine freezes at about 45° Fahr. and frozen explosives are more dangerous to handle, and often fail to give satisfactory results in use. Therefore, explosives which have become hardened by cold must be thawed, and this should only be done in a properly designed warming pan. Attempts to warm explosives on heated stoves, in ovens or near boilers or fires are likely to have disastrous results. Detonators should never be inserted in the cartridges until just before the primer is required for use, and when charging the bore-hole use only a wooden rod for pressing home the charge and tamping. The use of iron or metal tamping rods is highly dangerous, and on no account should a cartridge be struck or rammed forcibly. Before firing a charge make certain that everyone is well beyond the danger zone and protected from flying debris. The supply of explosives should also be protected from danger from this source. It sometimes happens that a charge, after lighting, fails to explode. This is known as a "missfire," and certain precautions are very necessary. It is never safe to go back immediately to a charge that has misfired. The fuse may have been injured in tamping, or may be faulty, and instead of burning at the normal rate, may

smoulder for a long time, then reignite the powder in the lower end of the fuse and fire the charge. The interval of waiting should be as long as possible, preferably until the next day, but never less than several hours. Missfires should never be bored out, but another charge should be put down far enough away for drilling in safety, but close enough to cause detonation of the misfire by concussion. The detonators used to fire high explosives should be treated with the greatest respect. They are quite small, but very vicious, and, although containing only a few grains of explosive, are sufficiently powerful to shatter a man's hand.

From the foregoing remarks it will be realised that the use of explosives is attended with considerable danger to persons having little knowledge of their special properties, and that the employment of an expert is, in the majority of cases, advisable.

One correspondent goes so far as to suggest that a large party of ex-Royal Engineers might be organised in each county to undertake the work of stump clearing, subsoiling, drainage, etc. This is a suggestion which could, quite possibly, be put into practice, supposing that landowners and farmers could be persuaded to take the necessary interest in the matter. A few of the many uses to which high explosives may be applied as an aid to agriculture were explained at some length in the previous article, and there seems no reason why they should not become just as much a factor in modern farming as silos, tractors or improved implements. The use of explosives affords a means of assisting to overcome the labour shortage, shortening the hours of labour and increasing production, and for these reasons alone is worthy of a fair trial.

EX-OFFICER, R.E.

OUR YOUNGEST MASTER OF CHESS

My Chess Career, by J. R. Capablanca. (G. Bell.)

THIRTY-TWO is rather an early age at which to begin writing an autobiography. But Capablanca's story of his early career will be read by all who value a human interest. During his visit to this country which has just concluded many of us beheld in Capablanca a charming, intelligent young man who would have attracted notice whatever might be his claim or want of claim to distinction. Handsome, thoughtful, and endowed with wide sympathies, he could talk with acumen and philosophy about many subjects in addition to the mystery to which he holds the key. It is true that other great exponents of the art of chess—for they call it an art and not a game—have had many engaging mental attributes. The late Mr. Bird had a kind of fascination for a man so diametrically opposite as John Ruskin. He was a very successful accountant, earning, we believe, an income of some two thousand pounds a year, when he abandoned his profession in the hope of becoming a chess champion. Unfortunately for him, Blackburne appeared on the field contemporaneously, and so his ambition was foiled. If Blackburne had devoted his mind to invention it is probable that he would have achieved both fame and fortune. His memory was extraordinary. In his youthful days he used to go out collecting debts for a tradesman, and on a certain occasion, forgetting the passbook in which the accounts were and not being able to get out of the train so as to retrieve it, he went round and collected a vast number of small accounts from memory alone and did not make a mistake. But this feat he surpassed in later life. When the City of London Chess Club was opened by Sir George Newnes, Blackburne was giving a display of blindfold chess. He was, in fact, in the middle of twelve games—we imagine he had played about twenty-eight moves—when Sir George arrived. There was a certain amount of speechifying in which he took part, replying for the professional chess players. He moved about freely in the company, refreshing himself with various whiskies and sodas and indulging in a good deal of that mordant wit which gained him the nickname in Germany, "The Black Death." Sir George left, and someone said, "Why not finish the games?" to which the apparently final reply was, "It is impossible, because the pieces were put back in the boxes." But Blackburne was equal to the occasion. He told the players to sit down at their tables and he would repeat from memory the moves he had made on each board, so that they would arrive at the positions where they were when interrupted. He was successful, and this feat of memory one has always regarded as about the most astonishing on record.

Capablanca's gift, like that of Lasker, is mathematical. In 1906, when he entered the University of Columbia to follow the engineering course, he, at the entrance examination, obtained the high mark of ninety-nine per cent. in algebra, employing only one hour and fifteen minutes of the three hours allowed for the work. It is highly interesting that the two outstanding chess players of the present day, Lasker and Capablanca, should both be keen on mathematics. Chess players who go through this book will very soon appreciate the significance of this remark. Both of these very modern players are sound and logical to a degree far beyond their predecessors. Anyone who has studied the brilliancies of a past age will see that the majority of them were due as much to the weakness of the victim as to the ingenuity of the victor. Blackburne, for example, owed far less to mental training than to an inexplicable instinct or genius. The admirers of Capablanca or Lasker, who are at last finally engaged to fight out the supremacy between them, know that although both abjure fireworks they are capable of brilliancy as great as that of any predecessor. But they begin with a quiet and a steady development, solely engaged at the

beginning of the game so to deploy their forces that they are in a position equally good for attack and defence. Woe to the adversary who in reply to this successful deployment makes a move that is really weak, however innocent it may appear to the novice. That weakness is at once appreciated and the guns, so to speak, are brought to bear on it till at last a winning advantage be attained. The brilliancy is shown in the ability to take the quickest and the most ingenious way to convert the advantage into a definite victory. Capablanca has won far more prizes for brilliancy than any chess player of his own age. It is interesting to note that he began his career by beating his father at the age of five and was a good player shortly after entering his teens. But those who study for the sake of improvement will find in the annotation of the games an entirely new and most illuminating method handled by a player who has an unparalleled command of the principles of the game. It is in this annotation that Capablanca reveals the mental processes which have brought him to the front at so early an age. Dr. Lasker has made very hard terms in regard to the match to which he has reluctantly consented, and Capablanca can scarcely have agreed to these save for his determination, rising above many considerations, that he should cross swords with the greatest player of the time. The two met in the great St. Petersburg tournament of 1914. He said in a conversation with the Vice-President of the St. Petersburg Chess Club that his health was not very good and "I would be satisfied if I finished second." It turned out a very close thing. Lasker was first with thirteen and a half points and Capablanca second with thirteen, while the third only scored ten. The conclusion is that there was very little between them. Since then three tournaments have been held at New York and one at Hastings. In each of these Capablanca came out champion, and it is remarkable that in the last four tournaments in which he has played he only lost one game. His record for the whole of the ten tournaments in which he has been engaged is that he won ninety-nine games, drew thirty-three and lost only eight.

The last chapter of the book is devoted to setting forth a few of the principles that guide him and that will be of service to readers. He divides the game into three parts, the opening, the middle game and the end game. In the opening the ideal "is rapid and efficient development"; in the middle game "the co-ordination of pieces," and in the end game "accurate and time saving play." The rest of his advice is simple and for that very reason valuable. He urges the novice always to play what you might call the common-sense move. He also exalts the quality of courage. Many people have an idea that a manoeuvre is good, but they are afraid to take it. That is wrong, he says. "You must go on and play what you think is good without hesitation."

Shepherd's Warning, by Eric Leadbitter. (Allen and Unwin.)

MR. LEADBITTER has written a novel of country life which is absolutely true to nature. His old man has evidently been studied from the life, and the villagers are the people we know. The style is sound and unpretentious. It has no purple patches, and leaves behind that sense of reality without which fiction is unbearable. Nobody who begins the novel will fail to read it to the end. If, however, the book, as well might be the case, were to be criticised in comparison with the work of the masters of the craft, one or two weaknesses would be revealed. Of the two young men, brothers, who are the principal characters, the one who enlists is a little vulgar and melodramatic, and the other is an amiable weakling whose lack of force deprives what he does of its heroic value. His marrying Sal, for instance, who has, in the homely Scottish phrase, "thrown a leglin girth" and is going to have a baby, would have appealed more to the chivalrous reader if it had been apparent that he realised the strength of the forces he was opposing. The minx herself would never in real life have settled down to a commonplace existence as wife of a market gardener. It is true she very nearly broke the traces again in a very objectionable way, but her story does not impress one as that which would flow naturally and inevitably from her temperament.

THE ESTATE MARKET

SALE OF FAMOUS OLD HOUSES

THE late Lord Alverstone was very proud of his Winterfold estate, and would often refer to it, when in the company of the surveyors to whom he was such a warm friend, though always protesting that it was to them, and their early encouragement of a young barrister, then Richard Webster, that he owed some of his success. When he built his mansion at Cranleigh he was able to avail himself of all the best talent of the day in the matter of its arrangements, and few estates are more complete and pleasing. Great lawyers in both branches of the profession have not infrequently exhibited excellent taste in house building; for example, the late Sir Frank Crisp, at Friar Park. In fact, they have been more successful in that way than some of them have shown themselves in the matter of drawing their wills. But that is another story. The executors have decided to sell the Winterfold estate by auction, and have instructed Messrs. Knight, Frank and Rutley to act in conjunction with Messrs. Tuckett, Webster and Co. The estate, which is about three miles from Cranleigh and about thirty-five miles from Hyde Park Corner, comprises the modern house, in which the late Lord Chief Justice resided until his death, pleasure grounds, lodges and 66 acres of woods. The residence commands views of Hindhead, Hascomb Hill, Black Down and the hills above Portsmouth.

BLAKESHALL ESTATE, KIDDERMINSTER.

THE trustees of the late Captain Hancocks have instructed Messrs. Knight, Frank and Rutley to dispose of the Blakeshall estate extending to about 840 acres.

LORD RADNOR'S ESTATE.

OUTLYING parts of Lord Radnor's Folkestone estate are to be sold locally by Messrs. Knight, Frank and Rutley, on March 5th. Much of the property has been sold privately to the tenants, and only about 1,000 acres remain for disposal, divided into about twenty lots. All the land is on the hills above Folkestone. There are many sites with views over the Channel to the coast of France. The agricultural land is suited for small holdings, poultry farming, market gardening and dairying, and the town provides an excellent market for the disposal of produce. Mineral rights are included with each lot, and these rights are of value and importance, for coal is being raised within a few miles, and this property is within the coal area. Another attraction is the excellent sport that may be had in the neighbourhood. Reinden Wood, which is to be included in the sale, is a noted fox covert, which has been carefully preserved and is rented by the East Kent Hunt. There are golf links at Folkestone and Hythe.

Lord Radnor is ground landlord of a great part of Folkestone, and the beautifully laid out and well ordered Leas neighbourhood shows the advantages of unity of control in town-planning, when this is coupled with foresight and public spirit.

PRIVATE SALE OF LYPIATT PARK

LYPIATT PARK, the historic home for so long a period of the late Sir John Dorington, M.P., has been sold. The property was illustrated in COUNTRY LIFE (Vol. viii, page 688). Some 320 acres of land accompany the mansion, which nestles in a lovely vale in the Cotswolds. The purchaser was represented in the private negotiations which resulted in the sale by Messrs. Bruton, Knowles and Co. (Gloucester). The mansion has a record extending easily as far back as the sixteenth century, and it is of considerable historical interest, for it formerly belonged to that Throckmorton who was notorious for his participation in the Gunpowder Treason and Plot. In fact, it is generally accepted that the abortive scheme was conceived in the oak-room of Lypiatt.

Sales amounting to over £40,000 have been carried out by Messrs. Bruton, Knowles and Co. in the last few days, among them that of Greenway, a pleasantly situated house near Cheltenham, the residence of Archdeacon Sinclair; and a couple of nice estates in the Forest of Dean district, Coombs Park, Coleford and The Wilderness, at Mitcheldean.

SALES FOR NEARLY £450,000.

SALES of landed estates recently effected by Messrs. Daniel Smith, Oakley and Garrard amount to approximately £450,000. They include Lady Lucas' Craven estate, about 6,160 acres, for close upon £200,000. This property was bought, we believe, for private ownership, and the tenantry are not to be disturbed. The sitting tenants everywhere have, of course, had consideration through the firm, and sales of that kind direct to the holders include Stantonbury, Bucks, about 800 acres; Theddingworth in Leicestershire, 700 acres, belonging to Earl Spencer; an Essex estate of 940 acres, close to the county town; and 650 acres on the outskirts of Hereford.

PERRY HALL AND ITS FUTURE.

LORD CALTHORPE has, through his solicitors, Messrs. James, Barton and Kentish, arranged the sale of a portion of his Perry Hall estate, on the outskirts of Birmingham. The famous old Elizabethan house is included in the 500 acres, in this the first portion of the realisations. The property is on the Walsall road, and has been within the boundaries of the City of Birmingham since the extension in 1911. The details which appeal to a syndicate—and it is said that a syndicate has bought it—are, of course, primarily the mile and a half or two miles of main road frontages and the gradual edging outwards, towards the estate, of the growing city. But the thing that all lovers of the beautiful and historical will be anxious about is the future of the priceless gem of Elizabethan architecture which has now come into prominence again, owing to the sale.

Perry Hall has, on one portion, the date 1569, and it is in absolutely perfect preservation. In the reign of Henry VIII—to be precise, in the year 1546—"Wm Staunford bought for himself an estate known as Perry Barre, and erected for himself a house, and arranged a park, the which he called Perry Hall." In 1669 the property passed, by purchase, to Sir Henry Gough, and ever since it has been in the possession of the Gough-Calthorpe family. The house is surrounded by a moat, and is architecturally worthy of that careful maintenance which, happily, its present value as a residence seems likely to ensure for it. The late King Edward visited Perry Hall many years ago.

It may be hoped that, whatever happens to the rest of the property, the house, with enough land to preserve the amenities of the mansion, may be kept up with due regard to its antiquity and beauty. Lord Calthorpe is understood to intend to dispose of further sections of his land in the suburbs of Birmingham. Nowhere can the value of old places like Perry Hall be higher, from an educational and inspiring point of view, than in the neighbourhood of great manufacturing centres. It is no small thing that the industrial population should be able to contemplate the remains of former days and have suggested to them almost insensibly, but perhaps on that account all the more forcibly, the continuity of English history and the part which they can worthily play in their own day and generation.

DYFFRYN ALED: LADY DUNDONALD'S TENANTS.

THE mansion house of Dyffryn Aled and one or two adjacent areas of land have not yet changed hands, but fully £50,000 worth of the estate has been realised in the private treaty and auction just concluded by Messrs. Wm. Dew and Son and R. Arthur Jones. The property extends to about 4,000 acres, and in the first instance, on the special instructions of Lady Dundonald, the tenants were approached, and exceptionally favourable facilities offered them for the acquisition of their holdings. With the characteristic love of their old homes, that is nowhere more strongly felt than in the Principality, the tenants for the most part eagerly seized the occasion, and sales amounting to £45,000 were arranged at once. The remaining portions of the property came under the hammer of the firm, at Colwyn Bay, and the bidding brought the total up to the £50,000 already mentioned. There were originally fifty-five lots in the particulars of sale, but when the auction was reached only half a dozen or so had to be dealt with. Mr.

R. Arthur Jones conducted the auction, and Mr. Harold Edwards of the Gwrych Castle estate offices, and Mr. R. M. Thomas, the solicitor to Lady Dundonald, as well as the auctioneers, have earned the hearty thanks of the tenantry for their conduct of the negotiations.

LORD BROWNLOW'S £190,000 SALE.

ANOTHER great Border estate, of almost the same acreage as that just mentioned, the Whitchurch section of the Bridgewater estates, belonging to Lord Brownlow, has been dealt with on the same principles, namely, submission at the outset to the sitting tenants. This transaction was entrusted to Messrs. Frank Lloyd and Sons, who succeeded in effecting sales by private treaty to the amount of approximately £100,000. The realisation of the whole of the lots that remained took place in public competition, and the total purchase money, in the public and private dealings, aggregated £190,000. Speaking at the auction at Whitchurch, Mr. William Nunnerley, one of the many tenants who acquired their holdings by private treaty, thanked Lord Brownlow for the privilege. He said that, born on the estate, he had hoped to remain there all his life as the tenant of a good landlord, but times had changed sadly, and good old English estates had to be broken up. Instead, however, of letting the tenants be bought out by rich men, the owner had given them the privilege of private purchase.

IN THE WEST COUNTRY.

CAPTAIN W. F. TREMAYNE is about to dispose of 5,040 acres of the Carclew estate, in north-east Cornwall, around St. Columb Major.

The Over and Nether Compton estates are for sale, by order of Colonel Goodden. This property, equidistant from Sherborne and Yeovil, may be said to embody the best of both the counties of Dorset and Somerset, and, though there is no house of great size on the property, there are many fine old farmhouses on the 1,100 acres, and one in the Elizabethan style, of Ham Hill stone, known as Serling Farm, at Nether Compton. Messrs. Hy. Duke and Son are the auctioneers, and the sale is fixed for March 18th, at Sherborne.

The Stanbury estate, at Spencer's Wood, near Reading, has been privately sold by Messrs. Nicholas, including the mansion, Hill House, the school and other property, in all 158 acres. Another sale of the last few days is that by Messrs. Matthews, Matthews and Goodman, in conjunction with Messrs. Miller and Abbotts, of a large area of land near Banbury, known as the Lampet estate, which runs to nearly 770 acres. The sales included 132 acres for £6,300. It may be useful to mention that The Highlands, a freehold country house and 60 acres, at Lower Tadmarton, was withdrawn.

Elmfield House, a fine old freehold residential property on the outskirts of Calne, has been privately sold by Messrs. Edwyn Fear and Walker, who offered the property by auction a week or two ago, when it was withdrawn. They have likewise sold part of the Hookpit Farm estate, in the village of Kings Worthy, three miles from Winchester, and comprising about 124 acres.

Messrs. Wise and Bowerman have recently sold by private treaty the following properties: Llanidan, Chorley Wood; The Brackens, Ash; Ballynella, East Sheen, together with the contents of the residence; and the lease of Ravenswood, Hassocks, together with the contents.

QUEENSBERRY HOUSE, RICHMOND.

THE early home of Viscount Cave—whose present house, Wardrobe Court, it adjoins—Queensberry House Richmond, was built by Sir William Dundas and is said to have cost £26,000. It replaced the villa or, as Horace Walpole described it, the palace of the Duke of Queensberry—"old Q." Queensberry House is at present occupied by Sir Henry Norris, M.P., and the purchaser is Mrs. de Trafford. Messrs. Pennington were the agents. The Cedars, East Sheen, has been re-sold by Messrs. Penningtons, who sold the property in the autumn for Major E. H. Leicester Penrhyn. ARBITER.

CORRESPONDENCE

TWO LETTERS OF THANKS TO FIGHTING MEN, 1920: 1643.

TO THE EDITOR.

SIR,—You may be interested to see this form of letter of thanks which has been adopted in many parishes in Herefordshire for presentation to every man who has returned from service. By way of comparison I send you also a copy of the letter of thanks addressed by King Charles I to the people of Cornwall. One or two of the phrases in the Hereford letter have been to some extent founded upon it. There are, I believe, some fine monuments in Cornish

to reward their loyalty and patience by many strange victories over their and our enemies in despite of all human probability and all imaginable disadvantages; that as we cannot be forgetful of so great desert so we cannot but desire to publish it to all the world and perpetuate to all time the memory of their merits, and of our acceptance of the same; and to that end we do hereby render our Royal thanks to that our country in the most public and lasting manner we can devise commanding copies hereof to be printed and published and one of them to be read in every Church and Chapel herein and to be kept for ever as a

date. The shallow bowl raised on stem with trumpet-mouth foot, a form which has rather absurdly acquired the name of "tazza-shaped" cup, is a type not of the fifteenth but of the sixteenth century. (Its development from the "font-shaped" cup of the early years of the sixteenth century can be studied in the illustrations of Sir Charles Jackson's "History of English Plate," Vol. ii, pages 689-697 and 653.) The low cover with flat rim is perfectly in accord with the later date, and so are the pellety mouldings round the foot and the ribbed mouldings round the stem. Above all, the scroll brackets on the stem, veritable symbols of the Renaissance, are conclusive for a sixteenth century date. If it were London work it might be given a date in the early part of the century, but its somewhat uncouth character proclaims a more outlandish place of origin, where fashions would be behind the times. The clue of its origin is to be found in the inscriptions, though these consist mainly of moral maxims. The English version printed obscures the quality of them. In Messrs. Christie's catalogue they are given *literatim*, and the forms gif (if), lang (long), vrang (wrong), quan (when), puir (poor), standis (stands), aboundand (abundant), are clearly Scotch. Examples of old Scotch dialect of this sort may be found quoted in Burn's "Old Scottish Communion Plate" (1892). The lettering, again, is sixteenth century in character. The cup is, apparently, an old family possession, and the account Mr. Tipping gives of the Methuen's former Scotch domicile explains why they have this most interesting piece of Scotch plate of the sixteenth century. It remains for Scotch antiquaries to discover the name of the silversmith whose initials "V h" are borne on the mark.—H. P. M.

FURNITURE IN THE "CHINESE" STYLE.

TO THE EDITOR.

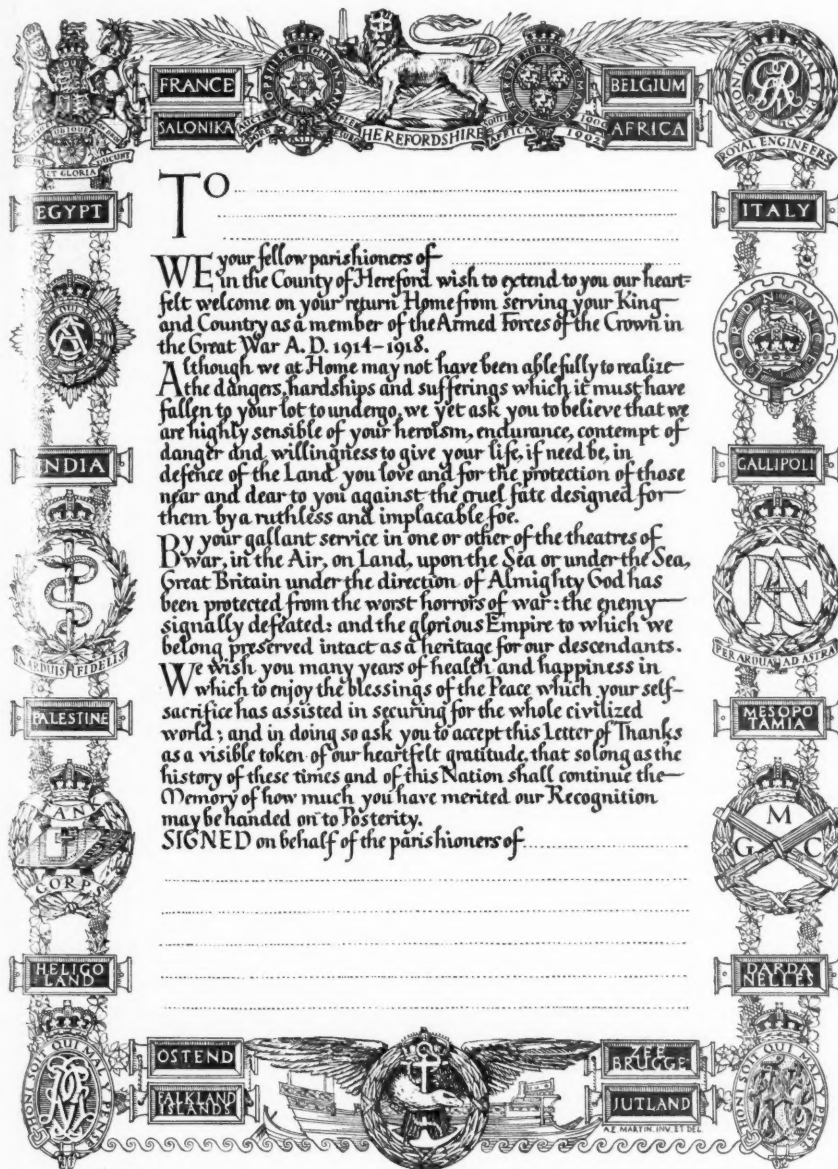
SIR,—Admirers of this species of English furniture will have been grateful for Mr. Tipping's appreciative article in your issue of February 7th. Most writers on furniture seem to be so much upset by the more extreme examples of the style as to be unable to understand how beautiful it is in its more tasteful manifestations. But there is one small point in which he seems to be mistaken. He suggests—and he is not the first writer who has suggested—that Mr. Griffiths' wall lantern was originally a receptacle for china. I am fortunate enough to possess a pair of these delightful pieces, identical with that which he illustrated, and can assure him that it is not so. What appears to be conclusive is the fact that the open friezes are made of brass and not of wood. This is inevitable if the pieces are lanterns. It is inexplicable if they are china cabinets. Moreover, I am convinced that the candle holders and the metal coverings of the floor in my specimens are original, and so are the metal linings of the pagoda roofs, which are still covered with ancient soot.—G. STUART ROBERTSON.

[Mr. Tipping writes: "I did not state that the little hanging piece was a china cupboard, but only admitted that it might have been, its use for a candlestick having been held as not original. Personally, I am quite prepared to think it was and am very glad to read the reasons which make your correspondent believe that his pair must always have been intended for candle lanterns."—ED.]

THE SHORTAGE OF TRAINED HUNTERS.

TO THE EDITOR.

SIR,—There is undoubtedly a shortage of trained hunters at the present moment. Someone must bring out young horses and educate them or the supply of hunters will cease. Nine out of ten young horses at first kick at other horses and hounds out of fear. If an old horse habitually kicks he must not be brought out. Every encouragement should be given to the men and boys who ride young horses. Many of the men who complain have no idea of the anxieties, difficulties, dangers and, I may add, pleasures of riding unmade horses. A well known dealer in the Shires has several times told me that none of his customers will look at them, while he can readily sell a horse that knows his business, even if showing work. For over forty years before the war I rode a three or four year old each season, and after a year or two passed them on at a big profit. By at first keeping in the rear or on the outside and never forgetting the way my horse's heels pointed, I have had very, very few accidents.—H. A. WADSWORTH.



HEREFORDSHIRE'S WELCOME TO HER SOLDIERS AND SAILORS.

churches with King Charles' letter engraved on them.—H.

COPY OF KING CHARLES' LETTER TO THE PEOPLE OF CORNWALL.

C.R. To the inhabitants of the County of Cornwall. . . . WE are so highly sensible to the want of our county of Cornwall of their zeal for the defence of our Person and the just rights of our Crown in a time when we could contribute so little to our own defence or to their assistance; in a time when not only there appeared no reward but great and probable dangers were threatened to obedience and loyalty; of their great and eminent courage and patience, in their indefatigable prosecution of their great work against so potent an enemy backed with so strong rich and populous cities and so plentifully furnished and supplied with men arms money and ammunition and provision of every kind; and of the wonderful success with which it pleased Almighty God (though with the loss of some most eminent persons who shall never be forgotten by Us)

record in the same. That as long as the History of these times and of this nation shall continue the memory of how much that County hath merited from us and our Crown, may be derived with it, to Posterity. . . . GIVEN at our Camp at Sudley Castle. . . . The 10th of September . . . 1643. . . .

Painted as above on a board in Stratton Church. Magna Britannia. Vol 3 pp 17 & 18 London. Cadell & Davis 1814. (By the Rev. Daniel Lysons Rector of Rodmarton and by Samuel Lysons Esqre Keeper of H.M. Records).

THE METHUEN CUP AND ITS ORIGIN.

TO THE EDITOR.

SIR,—May I venture to dissent from the opinion expressed in COUNTRY LIFE for February 14th, on the interesting early cup in Lord Methuen's possession? It is described as English work of the middle of the fifteenth century, but I think on insufficient grounds. First, as to its

TAM O' SHANTER COTTAGE AT BIDSTON.

TO THE EDITOR.

SIR,—You may like to see a photograph of the old sign at "Tam o' Shanter Cottage"



TAM O' SHANTER AS AN INN SIGN.

at Bidston, which is said to be the oldest licensed house in Cheshire. The picture is, of course, founded on Burns' poem, and if you look closely at it you can clearly see Tam's mare Meg having her tail pulled off. This was just as she reached the keystone of the bridge and so brought her master into safety, since witches and warlocks dare not pursue beyond the middle of the next running water.

"Ae spring brought off her master hale
But left behind her ain grey tail.
The carlin clautht her by the rump
And left poor Maggie scarce a stump."

—A. R. CROSS.

THE THREE HUNTERS.

TO THE EDITOR.

SIR,—The old black pug in the accompanying photograph used to follow the two terriers, his friends, every afternoon on their hunting expedition in the park or fields, and would wait patiently beside the tree or rabbit holes, while the terriers worked, in hopes of a rabbit or something bolting his way; he very seldom had any luck, and would have been useless anyway; but he loved the game, and would fuss round in a very important way, like a clown at a circus, who makes a great show of helping everybody but never does anything! Earth and rubbish would be sent out flying by the

terriers, full into the pug's face, but he took it all as part of the sport, and as a visible sign "that something was doing." When the terriers were too engrossed to take any notice of him, the pug walked gingerly round the tree two or three times, like a cat, and then took up his stand again at his old post, to assure his friends that all was quiet on the other side. At the end of the hunt, all three used to walk home together, covered with dust and rubbish, but very happy.—M. G. T.



THE PUG WAITS IN RESERVE.

"Billy and Charlies." You will find them described in the *Burlington Gazette* for September, 1903. The types and inscriptions are nonsensical, and they are to be found in most old curiosity shops.—Ed.]

FARMING THE WILD TURKEY.

TO THE EDITOR.

SIR,—On a ranch near Barstow, California, in the very heart of the Mojave (Great American)



WILD TURKEYS IN THE GREAT AMERICAN DESERT.

DOCK FORGERIES.

TO THE EDITOR.

SIR,—Information is sought as to the enclosed medallion, photographs of the obverse and reverse of which I send you. It is nearly four inches in diameter and about one-eighth of an inch thick, and made apparently of brass. Various suggestions have been offered as to its origin, viz., that it was a retainer's badge, worn by man or horse. The date Edward II has been mentioned; but what does the inscription mean? And in what language is it?



"BILLY AND CHARLIES."

Any help would be greatly appreciated.—A. S. LAMPREY.

[We have referred the question to a distinguished authority on the subject, who advises us: "The photographs you sent me represent one of a very large class of forgeries made about the middle of the nineteenth century at the London Docks, and known as Dock Forgeries; also, from the names of the men who first started the trade, as

Desert, is an immense flock of wild turkeys which promises to make its owner rich. There are about five hundred birds, the result of a singular experiment which proved a surprising success. M. A. Stutsman, a Los Angeles lawyer, conceived the idea four years ago that wild turkeys could be raised at slight cost because they are able to forage for themselves. He felt so sure of making good that he pulled down his shingle, went into a rather remote Southern California valley among bleak hills, got eggs from nests back in Virginia, and put hens on the hatching job. Fortune was with him. Each egg yielded a lively chick, and his flock grew apace. The birds quickly became accustomed to their new surroundings and were extremely hardy and healthy. In the second year Mr. Stutsman raised sixty fine hens and kept them all for breeding purposes. The third year saw an astonishing increase, and in 1919 he produced 1,500 birds for market. Many Californians had wild turkey for Thanksgiving, Christmas and New Year feasts, and the flavour probably was richer and better than that of the domestic fowl. Weed seeds, waste grain, grasshoppers, worms and bugs were converted into six or seven tons of delicious meat. He rented 500 acres of barley stubble for 5d. an acre. But his flock outgrew the valley. That's why he has gone to Barstow, where conditions are similar. So large is the flock now, and so tame the birds, that the herding is like that of a flock of sheep. Coyotes, eagles, hawks and snakes must be guarded against and the turkeys restrained from rambling too many miles away. In this work the owner, constantly occupied himself, is greatly assisted by his dogs—fine collies bred to police the ranch and fight off enemies. They encircle and turn and drive the herd with amazing intelligence. The birds differ little from the domestic species except in that they are smaller, more active, and better "rustlers." Given sufficient range they will grow fat on what they find. They fly like pheasants when alarmed, and with a mighty whirring of wings. The cock birds will fight each other literally to the death, and are proud and haughty. The turkeys hatch from March 1st to June 1st and are prolific, a hen laying thirty to thirty-five eggs a season.—HAROLD J. SHEPSTONE.

WEATHER WIT.

TO THE EDITOR.

SIR,—Your correspondent will find in the Gospels a much earlier reference to the red sky weather sign than that quoted from the thirteenth century MS. See St. Matthew xvi. 2, 3. "When it is evening, ye say, It will be fair weather: for the sky is red. And in the morning, It will be foul weather to-day: for the sky is red and lowering. O ye hypocrites, ye can discern the face of the sky; but can ye not discern the signs of the times?"—M. CORDELIA LEIGH.

THE WALLS OF CONSTANTINOPLE

BY GEORGE LAMLEY.



THE WALLS NEAR THE CASTLE OF SEVEN TOWERS.

"Byzantium's ancient walls are to be demolished."—*The Times*.

IT was difficult to believe that the above statement could be correct, but, in confirmation of it, the *Times* also published a letter from Mr. E. H. Freshfield, who said that he wrote to a correspondent in Constantinople to enquire if the report were correct, and had received a reply in which it was stated that the French military authorities pulled down part of the old walls near the Castle of Yedi Koulé (Seven Towers) to obtain material for the repair of the road from Yedi Koulé to Makrikeui. That this road was badly in need of repair was undoubtedly true, but ample supplies of suitable road metal could have been obtained with little difficulty in the immediate vicinity of the city. It seems incredible that, to avoid a little trouble and expense, such a wanton act of vandalism should have been permitted, and it is to be hoped that steps have been taken to prevent the further destruction of these ancient and historic city walls, the oldest in existence. Absolutely valueless from a military point of view, they yet form a very interesting feature of what is still one of the most picturesque cities of the world, in spite of the great fires of recent years and the introduction of modern improvements, which have removed so many of its ancient wooden buildings.

Starting from the Sea of Marmora, four miles from Seraglio Point, the walls are carried up the slopes to the Castle of Seven Towers, built by Mahommed II, shortly after he had captured the city, on the site of the old fortress of Constantine, and still retaining within its walls the much damaged remains of the

Porta Aurea, or Golden Gate, through which the Greek emperors made their triumphal entry into the city. The interior of the castle has been cleared of buildings, with the exception of a small mosque, and is now converted into gardens and orchards, but the outer walls and four of the towers are nearly intact, the other three being ruined in the upper portions. Built originally as a fortress to protect one of the more vulnerable points of the city's defences, it was converted into a political prison a few years later, when the consolidation of the Turkish power in Europe had made the city safe from all risk of attack. Beside it the chronicles of the Bastille are mild, for everyone, however high his position, who incurred the anger or suspicion of the despotic rulers or of the favourite of the moment was consigned to its dungeons; and few of those who entered them ever came out alive. It was here, too, that the janizaries imprisoned and afterwards murdered the Sultan Othman. According to Edmondo de Amicis there was, until its removal some seventy years ago, a vast heap of human bones on one side of the central enclosure that reached almost to the top of the ramparts. From the top of the wall a very extensive view is obtained of nearly the whole of Stamboul and across the Sea of Marmora to the Asiatic Coast.

From the castle the walls sweep round in a gentle curve, some four miles long, to Aivan Serai on the Golden Horn, about three miles above its mouth. The walls were triple, but of the outer one, which was of later date and of much slighter construction, little remains. The inner and oldest wall, dating from



THE WALLS NEAR ADRIANOPLE GATE.

the beginning of the fifth century, is still to a great extent intact, and the breaches that occur in several places are those made by the Turks when they captured the city in 1453, and never repaired by them as they so quickly subjugated all the neighbouring countries that the city required no protection. The great square towers that stand about one hundred yards apart along the whole length of the wall have suffered much from earthquakes, the tops being all more or less broken down and the sides seamed with great fissures. Some damage from this cause would appear to have taken place very shortly after its construction, for it is recorded that the second wall was built a few years later for this reason. Of this second wall, which was of slighter construction, only the lower part remains. So strong were these walls that during seven centuries they successfully resisted innumerable attacks by Huns and Goths, Arvars and Persians, Arabs and Bulgars, and it was not until 1204 that the city was captured, and then mainly through treachery. The conquerors were the Crusaders, and the kingdom they founded lasted for fifty-seven years, when the Greeks recaptured the city and held it, in spite of repeated sieges by the Turks, until Mahommed II at length succeeded in storming the walls, which

had been breached by stone round shot fired from cannon which are said to have been of such dimensions that it required two hundred bullocks to move them into position.

There are no houses outside the wall, and a road runs along the entire length, so that it is possible to follow it as it now towers above as we pass over a hill and then, dipping down into a valley, allows a view into the city and of many domes and minarets. The road is one of the vilest in a country of vile roads, and is impassable in winter to wheeled traffic; but in April it was possible to get along on foot comfortably enough by walking on the top of a low bank between the road and what had once been a moat, but is now cultivated in parts. On the other side of the road is a succession of cemeteries, their position marked by a forest of cypress trees in accordance with the invariable Turkish custom.

The walls are pierced by a number of gates, but there would seem to be little traffic through them, and during our walk round the whole circuit we did not meet a single passenger or see anyone in the fields. It seemed almost impossible to believe that behind those walls was a city with over a million inhabitants.

SOME NOTES ON LIGHT HORSE BREEDING

THE "NATIONAL" WEEK BY WEEK.

EARLY next month there will take place at the Royal Agricultural Hall, Islington, the annual show of thoroughbred stallions for the King's Premiums and the premiums offered by the Board of Agriculture. We shall be reminded then of the uninterrupted decline in light horse breeding in Great Britain. The big drop in entries will be evidence of the fact; but apart from this significance of the figures is the marked pessimism among breeders of this class of horse. They see no possibility of the decline being arrested, and it follows, therefore, that the outlook is grave from a financial point of view. It comes to this: that a breeder must have his remuneration for a horse twice that of pre-war prices, even if he is to hang on to the business as he did then. But not only is the double remuneration not forthcoming, the business is dwindling. The present day cost of keeping a horse for riding purposes is alarming, both for the breeder and the private user. The thoroughbred for breeding and racing purposes was never so valuable. The market value of the light horse suitable for a hunter, hack or Army remount has not kept pace with the greatly increased costs of production and maintenance. Moreover, the riding horse is certainly not the war horse of the future or the lessons of the war do not mean anything.

I notice that the King's Premiums have been raised in value by an extra £50. The same applies to the Board of Agriculture Premiums. The increase is intended to meet the increased cost of keeping and travelling the stallions. That it falls short of the intention is a fact which I do not think will be contested. There is no question of "crabbing" the coming show. Entries for it have already been made, and we know they mark a big drop. I remarked to one who has been absolutely in the front rank among those that have taken the highest honours at this show that the outlook was not encouraging. "Encouraging?" he replied, "I should think not. It is very serious indeed." One's estimate of the outlook will certainly be based on surer ground after the show has taken place, but those in touch with these matters know quite enough already to be very much disquieted.

I read in the *Bloodstock Breeders' Review* that "Much of the trouble that prevails would doubtless be removed if the Army Remount authorities could be prevailed upon to pay better prices for the horses they buy and would buy them younger than they now do." How often has the same argument been used by breeding societies, deputations of breeders, writers and individuals generally! Admittedly a big stimulus to this section of horse-breeding would be given were the War Office authorities to permit their buyers to double the prices they have hitherto paid for five year olds, taking them also at a year or even two years younger. But critics overlook the fact that the War Office has no purse of its own. Its spending policy must be sanctioned by the Treasury, which is the Government. It may recommend and urge, but it can do no more. The same applies to the Board of Agriculture, which in the past has been strictly limited in the moneys it has been able to give to the assistance of horse-breeding. What chance is there of more being forthcoming—more, I mean,

on a really substantial scale—at a time when economy is an urgent necessity?

Major-General Sir W. H. Birkbeck, who has just retired from the position of Director of Remounts at the War Office, was for seven and a half years in that position, and he admits that he has been compelled to leave light horse breeding in no better state than he found it. Why? Because it was all a question of money. He could not influence materially bigger grants; though he never ceased to urge the prime necessity from a War Office policy point of view of having an ample supply of light horses on which to draw for the adequate horsing of the cavalry, etc. I do not envy his successor, for he will be expected to do what the late Director failed to do, and I know how he, too, is, and will be, tied. Frankly I do not see how private breeders to-day can be expected to lift light horse breeding from its present parlous state. Hitherto they have borne their burden in quite a marvellous way, many of them from entire love of the horse. They cannot go on with labour and feeding-stuffs costing what they do and taxation growing to formidable proportions. Horse-breeding enterprise in France is aided by the State, who do not hesitate to draw on certain deductions from betting on racecourses. It is the only remedy for this country, but again prospects are slender. No one of weight has the courage to convince the Government of the great possibilities of this means of gaining revenue for the amelioration of national horse-breeding enterprises. The Jockey Club studiously ignores the potentialities of the Pari-Mutuel. And so we are drifting on, and the forthcoming show in London will be a reminder of the steady decay of what was once a very notable industry.

Turning to racing topics I should like to touch again this week on Grand National developments. The race is such a sporting affair in all its aspects and interests, so much to every lover of a good horse, that discussion from week to week is, I believe, looked for in these notes. First, let me say that Poethlyn, who is expected to win again for Mrs. Hugh Peel, continues to do well. His jockey, Ernest Piggott, told me the other day that the horse gave him a bit of a shaking when he fell during a gallop over fences at Lewes. Poethlyn, however, was no worse for it. "He was just as cheeky as ever," he said. Piggott added that he thought the fall would do him good, since it would teach him not to be careless. "He is a bit careless at times, you know," remarked this fine jockey. Well, one does not expect a careless jumper to get twice round the course at Aintree; but I would qualify that observation in the case of Poethlyn by suggesting that it is this same carelessness which reveals his cleverness. I always think, whether it be in the hunting field or in a steeplechase, that the horse which never takes a chance is slow. A steeplechaser to be successful must have speed, and I do not think it will be denied that they go a pretty good gallop at Aintree. I have an idea that they go faster in these days than, say, twenty years ago and earlier. Poethlyn is quite a fast horse, and from close observation of his jumping I long since came to the conclusion that he is not disposed to exert himself in jumping

more than is absolutely necessary. Thus he never seems to show any daylight when taking a fence, no matter what its nature may be. I am quite sure the Aintree fences will be rather more formidable than they were last year. Yet that fact, as an admirer of Poethlyn, does not alarm me.

The Irish horse, Troystown, is looked upon—especially in Ireland—as the favourite's chief rival. How odd it is, therefore, that he, too, should have fallen in an exercise gallop over fences when the mount of Mr. Jack Anthony, who is to ride him at Liverpool! Again the horse has been promptly excused by his rider. He is a rare cut of a horse, and if I have any criticism to offer, it is that he gave me the impression when I saw him perform at Liverpool last spring of being rather impetuous. It may be a mistake to set too much store on his winning the big steeplechase at Auteuil last year. Frenchmen have since told me that the opposition they had to offer on that occasion was undoubtedly weak. Ballyboggan will be a worthy second hope to represent Ireland, while Clonree has many admirers.

Clearly Poethlyn is not to have matters all his own way as he seems to be having at present in the market. What of the

opposition at home! W. Payne, the trainer-jockey, has hopes of Turkey Buzzard, "a beautiful horse," as he described him to me the other day. Then he also has General Saxham, who has already given evidence of his ability to jump and stay over a long course. In searching for the winner of the big steeplechase you must not overlook any of those likely to trouble the public's first fancy. I can personally say a good word for Major Scott Murray's improving young horse Gerald M., and Tom Leader, who trains Lady Wilton's steeplechasers, says "Taffytus will run very well." He, too, steadily improves. Then it is said the very successful amateur, Mr. Fred Rees, is to ride Loch Allen, who, however, only meets Poethlyn on 2lb. better terms compared with last year.

That fact, however, does not greatly dismay "Bob" Gore. He thinks the horse has come on a lot and that he possesses those virtues looked for in a Grand National winner. Altogether, in spite of Poethlyn's dominating personality and candidature, the big steeplechase unquestionably possesses many attractive features. And so I hope we shall find it on the day.

PHILIPPOS.

A NATAL TROUT

THE MOOI RIVER.

BY GEORGE SOUTHCOTE

THERE is a delightfully soft sound about the word "Mooi" when you hear it from the lips of a South African. It is rendered better by "lovely" than "beautiful," and lovely it is to arrive by a stream of running water, with infinite possibilities of trout therein, after a long sojourn on the high veld in a dry season, when all vegetation has been burned up by a hot sun by day or nipped by frost at night, and the nerves of the brain worker are as strained and responsive as banjo-strings. For some folk the drawback to visiting the Mooi River is that in the best trout-stocked parts there is no accommodation to be found on its banks. You must camp. Camping means transport, and in the days of which I write transport is difficult to obtain, but we are in a position to surmount that difficulty. A twenty-mile drive in a Cape-cart behind four mules brings us from the nearest railway station to a perfect camping-spot on short grass, near some small trees. There we can hear the subdued roar of a miniature cataract caused by a sudden drop of about 30ft. or 40ft. in the rocky channel of the river. Above the fall there is broad open land covered with short grass; the stream is bordered with clumps of arum lilies and other rank marsh plants, but there is nothing to interfere with overhead casting. The river has cut for itself a fairly deep channel, constantly meandering in its course, and providing about three miles of fishing for every mile of direct advance; in appearance rather like the River Axe, as seen from the London and South-Western main line to Exeter. At each turn one bank is steep-to, forming a miniature cliff, the other bank shelving.

If want of accommodation under a roof was a drawback beforehand, because of all the trouble of collecting and transporting camp equipment and stores, it is a great advantage when all the preliminaries are over. We wake up early in glorious fresh air, after a really restful sleep, with the pleasant feeling that there is a long fishing day ahead of us, exploring new water in complete solitude. The scent of a wood fire and the sound of frizzling bacon steal into the tents, and we hasten our ablutions and preparations. After breakfast we start off in different directions, full of hope and expectancy, with the waterfall as the boundary between our beats. These extend above and below it far beyond the range of the most adventurous. The upper beat is mine. We only muster one landing-net in our combined equipment, and it does not fall to my share to-day. My plan of campaign is to try the dry-fly in suitable spots, if trout or rises are to be seen; if not, to search the waters with wet flies.

Plop! . . . I am walking along the bank where I cannot see over the edge on account of the rank vegetation, and I do not seem to recognise the note of that particular kind of "plop." I walk on a few yards. Plop! again. Then a few more yards, and constantly those plops, coming sometimes singly, sometimes in twos and threes. The mystery is soon solved. Frogs, big and little, but mostly little, are taking headers into the water as soon as they hear or feel my footsteps approaching. Not long ago I was shown, in an hotel in Durban, a 6½lb. brown trout in prime condition, caught (I could not find out with what he had been beguiled) near this part of the river. I wondered at the time what diet had brought him up to that weight, and now I think that I know. The Mooi River was stocked with trout some years ago in the interests of fly-fishers, and we stick to the rule of "fly only" in these parts, though the minnow is also allowed in some of the beats below. I begin to hope,

watching for rises. During that first long day of flogging the water in the sweltering heat I ponder deeply at times over a fly-book stocked with sea-trout sizes, wondering which of them looks most like a small frog. Not a trout shows up anywhere, and the water is not clear enough to see what is going on more than six inches or so below the surface. I can only imagine the fate of the froglets making those perpetual little plops by their headers off the bank.

It gets hotter and hotter and mysteriously still. There is not a breath of air. At last I give in, tired out, lie down with my back against a bank facing the Drakensberg range of mountains, which shows up clearly in the distance, and soon fall fast asleep. I am awakened by a blinding flash and a clash of thunder. A complete change has come over the scene. A thunderstorm has left the mountains and is sweeping slowly down the course of the river, but only the edge of it has reached me as yet; looking down-stream I can see the country still bathed in sunlight. Up-stream, heavy clouds shut off the river, with lightning flashes playing perpetually over their indigo background. The disappearance of the trout all day is accounted for, and it is obviously worth my while to try again under the new conditions, but by the time I have picked up my rod and begun to cast the lightning is on all sides of me, and I feel like a prominent, timid, and very unnecessary excrescence upon the landscape. My rod seems to be inviting the vengeance of the elements if I keep it pointed upwards like a lightning conductor, so I compromise between timidity and keenness by casting underhand across the head of the pool and let the stream work the flies, a "woodcock-and-yellow" for the tail fly, and a "Zulu," as a tribute to local associations, as a dropper. In a few minutes I am rewarded. Something unseen takes hold, deep under water; the rod bends right down to the butt when I try a steady strain, so I know that something to be worth the landing. There is no more thought of the lightning or of the crashing thunder accompaniment to the twenty minutes' battle. The trout plays like a sulky salmon (its weight turns out to be 3½lb. when landed). My gut is old, brought out from England years before, and I dare not take liberties, but luckily the water is clear of all obstructions and the bank on my side forms a gently shelving little beach. Slowly and surely does he at last respond to pressure until his head is actually aground. I get behind him in the shallow water, holding up the rod and keeping a gentle strain landwards, get my foot slowly under him, and a heave sends him well up the pebble slope. Down goes the rod, and I am on my knees grasping by the gills my first Natal trout, more than double the weight of his successors that found their way from the Mooi River into my basket; one of those sudden turns of fortune that come to us sometimes at the end of an exhausting and disappointing day's fishing.

And so homewards, past the arum lilies ("pig-lilies" their local name!) and the froglets still plopping to their doom. Back through the slanting sunrays, the thunderstorm rolling down the valley before me, towards my companion on his homeward way to the camp. A glorious sunset, gilding the mountains in the west and glowing rose-coloured over the low clouds in the eastern sky, and suddenly the night is upon us. A welcome and refreshing tea, a tub in a canvas bath, and a long peaceful evening, with tired limbs relaxed, talking over things great and small with my companion in sport, a very great man then and always thought of as "my Chief," under the stars of a South African night.

GOLF AND GOLFERS

BY BERNARD DARWIN.

CHAMPIONSHIP PROBLEMS.

THE end of this week will see the meeting of the Royal and Ancient Club at which will be appointed the Committee to manage the Championships. That Committee will have—if one may so speak of an august body—to pull its socks up, for there is plenty to settle before next June. The Open Championship would seem to present no vast difficulties, for the P.G.A. have already been played in aid of the qualifying arrangements. Incidentally, I hear that the new holes at Deal are doing famously; one of their chief authors and devotees is prepared to eat his hat or perform other reasonable penance if they are not in perfect order for the Championship. No, the Open may be plain sailing enough, but the Amateur Championship will hardly be so. Everybody appears to be sure that there will be a record entry at Muirfield and the qualification scheme must be drawn up quickly. How amateurs can qualify locally is a terrible puzzle. A professional has but one domicile, and it is perfectly easy to know in what section he should qualify and how many places should be given to that section. Some sections may be much more "cushy" than others; still a plan which is at least arithmetically flawless can be arrived at. But an amateur is a will o' the wisp who flits deceitfully from club to club all over the country, and it is very hard to nail him down to any particular one.

OXFORD AT WALTON HEATH.

Unquestionably the best thing that Oxford has yet achieved was their victory at Walton Heath last Saturday. The Waltonians, if not at their very fullest strength, had yet a really strong team, and they were on their native heath. That is a point that can never be rubbed in too hard or too often as to these University matches. To catch an early train, possibly breakfastless, make a tedious journey, play two or three holes on a strange course, and then face a sufficiently good player who knows every blade of grass—this is a severe test, and if these undergraduate sides seem sometimes to collapse rather badly there is a great deal of excuse for them. I can vividly remember the misery of starting from Cambridge to Yarmouth on a bitter November morning—called at six and then some three hours in the train—and hope I can make due allowances for anyone who does not play his best in such circumstances. However, no allowances were needed for Oxford at Walton Heath. It was we, the poor Heathens, who needed charity. We were gleaming—metaphorically—with purple and gold: we were all supposed to be "plus" except two who were "scratch": we did not in the least expect to lose, but we did, and the Oxford victory was thoroughly well deserved.

A DRAMATIC VICTORY.

It was a thorough sell, and as I happened to be the earliest starter I had the amusement of being more thoroughly sold than anyone else. Having just won my own match against Mr. Thomas (and a very scuttling, scrambling, lucky win it was), I went to look at other people and all seemed going admirably. Mr. Angus Hambro played the seventeenth beautifully and just polished off Mr. Wethered: Mr. Arnold Read came back with half a dozen holes in his pocket; rumour announced—and truly—that Mr. Holderness was murdering Mr. Beck. True, I had seen Mr. Mellor hole a vast putt on the home green to beat Mr. Legge, but what was one match? All was serene. Then suddenly black clouds began to lower. Mr. Tolley had beaten Mr. Layton. Well, Mr. Tolley was a very fine player and we were still quite safe. Mr. Burton had beaten Mr. Quilter—that was not so pleasant. Mr. Owen Bevan was ploughing a lonely furrow through the heather at the seventeenth against Mr. Gurney: he got extremely warm but he could not get out of it. That was quite horrid. Then came a flying message across the course that Mr. May and Mr. Bruce were both sadly down. Heavens above! We—the team of all the plusses and all the talents and on our native heath—we were actually going to be beaten! And so we were. As a matter of fact, I don't know that we minded very much. Certainly we were glad to see Oxford do so well; but we should like to get our own back some day.

CAMBRIDGE IN DOLEFUL DUMPS.

While Oxford, who had been disappointing the week before at St. George's Hill, retrieved themselves so nobly at Walton, Cambridge have been having a disastrous time of it against Sunningdale, Coombe Hill and Wimbledon. In the first two of these matches their score in the singles was a series of horrid round o's, a total and absolute blank, as blank as ever were the faces of the Dingly Dellers. It was altogether a bad job, nor, I fear, have Cambridge any real chance in the University match; but there were one or two crumbs of comfort to be extracted. Especially did Mr. Johnstone, the captain, do extremely well to beat Mr. Bond at Wimbledon and to run Mr. Carver to the last hole at Coombe, for both these players are very formidable on their own courses. This applies especially to Mr. Carver.

He is, of course, always a good golfer, but his skill at Coombe is proverbially greater than anywhere else. He knows the runs and slopes and trickinesses of that charming course far better than most of us know our own back drawing-rooms, and very few golfers, whatever their eminence, ever succeed in beating him there. Mr. Johnstone did much better than most people.

WEST HILL REVISITED.

A few days ago I revisited a very good and pleasant golf course that I had not seen for a long time, West Hill. Since it is a little overshadowed in fame, though not in natural merit, by its neighbours at Woking and Worplesdon, I add the geographical information that it is very close to Brookwood station. Looking back on thirty something years of bad shots, I do not think I ever played quite so badly, and I had suicidal moments in which I reflected that there was, in Sir Lucius O'Trigger's words, "very snug lying" in the necropolis next door. Under these circumstances it is a real compliment to West Hill to say that I enjoyed my day very much and thought the course delightful. It has all the beauties and virtues that we associate with golf in that neighbourhood—the heather, the black firs, and the graceful silver birch trees, the green glades—something narrow and terrifying—running through the woodland, the pleasant undulations, the bunkers cut rather diabolically near the greens, the big stretches of view with lovely blue distances. Take a good pinch of Woking and Worplesdon, a touch of Bramshot, perhaps just a *soufflé* of New Zealand, add a meandering stream carefully netted to stop you losing your ball, and from this capital recipe you get West Hill—a capital course.

SOME HOLES AND CHANGES.

Like many other courses, West Hill has not come quite scatheless out of the war. There is at present a little too much moss here and there, which looks extremely pretty, but is not good for putting greens and so is being sternly dealt with. Mr. Frank Janion, who used to be at Sheringham, is now the secretary there, and he is attacking the course with great energy and a large army of workmen. Those who know the course may like to hear that at both the first and second holes the greens are being carried rather further on—in each case I think an improvement, without taking away anything of the character of the holes. A great deal of work is being done at the ninth, where the green is being altogether remodelled, and when it is finished the hole will be a very good long-short hole, calling for a cleek or spoon shot. There are various other things being done which it would be tiresome to enumerate. When they are finished the course will be very good indeed. It seems to me that, without being in the least unfairly narrow, it demands—and rewards—continuous accuracy with the tee shot almost more than any other of these woodland and heather courses. Certainly it rewarded my continuous inaccuracy in most bountiful measure.

ENGLAND'S VICTORY AT DUBLIN

OF all the International matches played by England there is none that one looks forward to with greater pleasure than that against Ireland, and the game usually fulfils those hopes in every way. There is never the same friendly feeling about the Welsh match, while the Scottish match is too stern a struggle, too much of a "life and death" affair, for such pleasant anticipation to be possible. It is not that the game is any less hard than the others—a tackle in the Irish fashion is not a thing that one forgets easily!—but there is such a sense of camaraderie between the players and, directly the match is over, no matter who has won, one knows that one's late opponents will be the best of friends and the most delightful of hosts; one cannot forget that the Irish are the greatest sportsmen in the world.

Among the many memorable matches played between the two countries, the first that took place after the end of the War will probably be handed down as one of the most exciting in the whole series. So stubborn was the Irish defence, that it was not until ten minutes from the end that England drew level, and then, during those last fateful minutes, it seemed impossible for them to pierce the line again, try how they would. It was eminently fitting that the winning try should be scored by Lowe, who has served his country so well in all his twelve International matches, the greatest wing three-quarter back of the present day.

Although England won by 14 points to 11 only, yet they had more of the game than this score would seem to indicate. At half-time Ireland led by a penalty goal to nothing, but they were very lucky to be in front, for the English XV had outplayed them at every point, and only Crawford's magnificent play at full-back had kept them out. Crawford is indisputably the finest

back in the four countries; his tackling, fielding and kicking were faultless. To be three points down was bad enough, but within five minutes from the beginning of the second stage of the match, England was eleven points behind, and things looked pretty serious for the visitors. However, the forwards rose to the occasion, and, by sheer dogged determination, and inspired by the leading of Greenwood and the superb play of McIlwaine, gradually wore down the opposition and enabled the score against them to be, first reduced, then equalled, and at last passed.

The honours of the match must be shared between the forwards and the half-backs, for Davies and Kershaw were at their very best and opened up the game in a way that was worthy of the greatest of their predecessors. E. Myers, of Yorkshire, who is equally at home as a centre three-quarter or stand-off half-back, was playing his first International match; he was one of the successes of the day and should be able to look forward to many another "cap." It really seems as if the centre had been found at last who was needed to give the wonderful capabilities of Lowe as a scoring wing three-quarter full scope—and not before it was time, too! Harris, on the other wing, was quite good, and any doubts that had existed as to his defensive powers were set at rest. The one failure among the backs was Smallwood. The Cambridgeshire player is young and will no doubt be tried again in the future, but at present he is not up to the standard required for football of this class. Cumberlege was very much better than at Swansea; he made one bad mistake, which cost England a try, but otherwise he did all that he was asked to do, and did it well.

Captain McIlwaine was the best of a splendid pack; in the rushes, in the line-out, in following up, he was always conspicuous, and he is a genuine worker in the scrummages. Greenwood was again in good form and deserves much praise for his courageous leadership when the prospects of a victory seemed very remote. Mellish, Wakefield, all played a man's part and can look back with justifiable pride on their share in England's success. Only the forward is likely to be replaced when the next team—against Scotland—comes to be chosen, and that one is Smart, who scarcely "pulled his weight" in the scrummages. There are many fine forwards who may be asked to take his place, such as White, of Yorkshire, Lawless, of the Army, and Wright, of Devonshire.

The kicking of R. A. Lloyd, the Irish captain, was a valuable asset to his side, but as a half-back he has passed his best and was far too much inclined to hang on to the ball instead of passing to his three-quarters. In consequence, it is hard to criticise the latter; they were given too few chances of showing of what they were capable, but the defence of Cullen was admirable. The Irish forwards, while they showed glimpses of their traditional dash in the loose, were slow in heeling, and so handicapped the half-backs. The outstanding player on the Irish side was certainly Crawford, to whom reference has already been made.

It is pleasant to record that the great crowd of 25,000 spectators who watched the match showed just that generous appreciation of their visitors' play and the sportsmanlike spirit in defeat that one has come to expect in Dublin. It is impossible to be too thankful that in Rugby football, at any rate, there is a meeting ground where vexed questions of politics gain no admittance.

L. R. TOSSWILL.

LESSONS FROM THE MODEL GARDEN AT OLYMPIA

I WAS inspecting the model vegetable garden at the "Ideal Home" Exhibition at Olympia when my companion, a leading authority on the allotment movement, remarked: "This is the most valuable exhibition of vegetables I have ever seen." As this view is endorsed by other experts in vegetable growing, it will be worth while to examine in detail the principle on which the garden has been designed.

The plot is divided into three sections of equal size. These sections are interchangeable. The only permanent features of this vegetable garden are the two ends—rhubarb, herbs and seed beds at one end, and runner beans at the other. It is found in experience that runner beans may be grown in the same position year after year. They are placed at one end of the plot to cast the least shade upon the garden.

Section 1 is devoted mainly to root crops; Section 2 is almost entirely occupied by main-crop potatoes; while Section 3 contains beans, cabbage and early potatoes. Now it should be pointed out that these three sections work in rotation, that is to say, in the second year Section 1 is cropped as Section 3, and in the third year it is cropped as Section 2. The advantages of this system are many. Let us, for one moment, consider the question of manuring. Section 1, as shown in the plan, is devoted mainly to root crops. Fresh manure should therefore be avoided. The ground should be double dug as early as possible, and decayed leaves and vegetable matter should be incorporated with the soil. This section is dressed with basic slag, sulphate of potash, burnt garden refuse and wood ashes. Section 2, occupied mainly by potatoes, is dug over in the autumn and dressed with decayed farmyard manure, superphosphate,

sulphate of potash and burnt garden rubbish. At the time of earthing up, the potatoes are dressed with sulphate of ammonia. Section 3 is manured similarly to Section 2; but in spring the ground is dressed with lime, and the green crops are encouraged with sulphate of ammonia, or nitrate of soda, at the rate of a quarter to half an ounce per square yard in the growing season.

An important feature about the model garden at Olympia is that the crops are shown in full growth, as though the season were June, instead of February. The plan indicates the cropping as it is seen at the present time, but consideration should be given to successive cropping. Thus the broad beans in Section 1 are followed by autumn-sown onions to remain next year. The early potatoes in Section 2 are followed by spring cabbage, to be followed by leeks and celery.

In Section 3 the mid-season peas are followed by broccoli, and the early potatoes by late cauliflower or savoy. It should be noted that this method of cropping a garden or allotment has been designed by the Ministry of Agriculture to produce the maximum amount of food from the land. Having sent cropping plans to the county councils throughout the country, the Ministry were anxious that their scheme, showing the summer cropping, should be demonstrated at Olympia. Consequently, Messrs. Sutton and Sons, of Reading, were asked to prepare and lay out such a garden in the short space of five weeks. The challenge to their efficiency was accepted, and the result is the model garden as shown. How the plants were got into their present condition of growth in five weeks in the middle of winter will be a mystery to many. The vegetables are all growing luxuriously in the open ground and give no indication of having made the journey from Reading in motor lorries a short time previously.

The main-crop potatoes are planted 2ft. 6ins. between rows; the early potatoes, now earthed up, are in rows 2ft. apart. The leeks and celery are growing in trenches, a double row in each trench. The peas will soon be showing bloom, and the runner beans are starting to climb the sticks. Onions, beets, carrots, parsnips, marrows and shallots are several inches high; while rhubarb, spring cabbage and lettuces are ready for use now.

By adopting this method allotment cultivators would be rewarded with a fine distribution of vegetables over the whole season. That is, of course, one of the chief reasons for making a plan. The man who sows and plants aimlessly is almost sure to get a dearth of vegetables at one season and a glut at another.

The garden is surrounded by an edging of turf, giving a pleasant finish to this most interesting exhibit. There is, however, only one pathway, and that 1ft. 6ins. wide, in the vegetable plot. On very heavy ground our cultivators might with advantage adopt the plan which is so common in France of having many small paths to enable them to tend the crops without treading on ground under cultivation.

H. C.

Rubbish Pit.	RHUBARB.	Sage.	Seed
Marrows	PAFSLEY.	Mint.	Beds.
	Thyme.		
PATH.			
AUTUMN SOWN ONIONS.			
Two rows			
SPRING SOWN ONIONS.			
Five rows			
MAIN CROP CARROTS.			
Five rows.			
PARSNIPS.			
Three rows.			
MAIN CROP BEET.			
Three rows			
SUMMER BEET.			
One row.			
LETTUCE.			
On ridge.			
LEEKS.			
Double row in trench.			
DWARF BEANS.			
On ridge.			
CELERY.			
Double row in trench.			
LETTUCE OR RADISH.			
On ridge.			
BROAD BEANS.			
Double seed row.			
SHALLOTS.			
Two rows.			
POTATOES.			
Main Crop and Late Second Early.			
Seven rows.			
POTATOES.			
Second Early. Three rows.			
PEAS.			
Mid-season Late.			
CABBAGE.			
Summer and Pickling. Two rows.			
PEAS.			
Mid-season Early.			
POTATOES.			
Early Four rows.			
PEAS.			
Early.			
BRUSSELS SPROUTS OVER EARLY TURNIPS OR CARROTS.			
Two rows.			
RUNNER BEANS.			
Permanent position.			

PLAN OF THE DEMONSTRATION PLOT. SPRING AND SUMMER CROPPING.

WILDFOWLING IN KOREA

By C. D. LACEY AND J. M. DODINGTON.

A PARTY of half a dozen English officers, withdrawn by Government orders from their hopeless task in Koltchak's unfortunate army, were awaiting at Vladivostock the steamer which would carry them homeward. In one of the crowded town's polyglot cafés they made the acquaintance of two Russian officers, also temporarily out of employment, at whose heels trailed two dejected dogs. One of these quadrupeds was, *par politesse*, called retriever, the other, by still greater stress of courtesy, might have been dubbed pointer. "And of infinite merit as sporting animals," said their owners; also "why not arrange a little shooting expedition during which their merits would be at the service of *les messieurs*?" At least it would serve to pass the time, and they knew of a lonely spot, False Island, some miles south of Posiëtt Bay, the point where Manchuria, Russia and Korea meet, on whose marshy shores the wildfowl swarmed in millions. Needless to say, the Englishmen jumped at the opportunity, ten days' leave was obtained, and in a very short space of time the expedition was arranged.

At 3.30 on the afternoon of September 15th their tug steamed out of Vladivostock Harbour. A rather unexpected addition to the party was the wife of one of the British officers. She heard, but heeded not, the tales of discomforts to be endured. Even the captain's grim assurance that should the wind blow with even half-gale strength the rickety craft would inevitably go to the bottom, failed to move her. With true British pluck she maintained her place by her husband's side, and in the event proved an invaluable addition to the party's strength.

But, alas! there was one sad defalcation. The Chinese boy, who had signed on as cook, failed to appear, no substitute could at the last moment be found—what was to be done? Never say die! Two English officers stepped into the breach, and real culinary artists they proved, serving up in most appetising fashion the duck which were the party's staple diet during the trip.

The afternoon sun shone down brightly on Russia Island, that fortress which commands the approach to Vladivostock from the sea, and on the sparkling waters of the Bay of Amur. Night fell as the tug steamed out into Peter the Great Bay, keeping the rocky coast of Russia close on the starboard bow, and a full moon rose, throwing a silvery pathway across the gulf from which numerous small islands stood up purple black. At 1 a.m. the entrance to Posiëtt Bay was passed, and anon came the rocky promontory of False Island. Into its lonely bay the tug turned, steaming slowly and keeping the lead constantly going. Soon the Russian officers recognised the tall wooden chimney of the long, low hut which was to be the shooting

an enormously large species of scallop, are exposed to the sun and dried for winter use—a fact to which the party's olfactory nerves bore ample testimony. Close to the tall chimney of the hut stood three straw-roofed shanties occupied by crowded families whose life-work it was to shell and shell and shell. Other human habitations—or occupations—there were none. Immediately behind the hut rose a steep bluff from whose summit an extensive view of the shooting ground was obtained. To



WADING INNUMERABLE SHALLOW RIVERS.

the north lay the bay, to the west stretched a vast expanse of marshy land covered with reeds and long grass, intersected by numerous wide, shallow rivers and lakes. Here and there abrupt rocky hills rose like islands from the flat expanse, while, far behind and closing in the picture, range after range of the barren Manchurian mountains towered into the grey sky. To the south a long sandy beach divided marsh from sea.

The sombre land seemed almost destitute of inhabitants, though later on a few scattered hamlets of straw-roofed huts were discovered crouching in the folds of the hills. In primitive fashion their owners cultivated tiny patches of sound land, and were occasionally to be seen driving miniature carts drawn by diminutive oxen. Most of them could speak a few words of Russian; they were very friendly in their attitude, and were, apparently, quite happy and contented in their mode of life. Their acquaintance with contemporary history may be deduced from the query of one rather-beyond-the-ordinary intelligent old man who anxiously enquired when the war between Russia and Japan was likely to be ended!

For the first two days of the trip rain fell without a moment's cessation, and for the first two nights the whole strength of the party was concentrated in a desperate battle against the innumerable cohorts of creeping things which disputed with them the occupation of the hut. On the third day, however, the sun broke through the clouds and the weather became bright and warm. So, with a sigh of relief, the party gave up the unequal contest, left the creeping enemy in full possession of the hut, and, carrying forth blankets and baggage, for the remainder of their stay bivouacked in blessed tranquility upon a sandy beach some distance apart from shells—and smells.

Every morning after a refreshing plunge in the surf the sportsmen started off for the *chasse aux canards*. Trudging through the long grass, wading across innumerable shallow rivers, they made for one or other of the numerous ree-fringed lagoons or lakes, bagging on their way a few quail, an occasional snipe, and a brace of pheasants (in September). On the surface of the lake the duck were settled in thousands. As they rose the sound of their wings was like a mighty rushing wind. The guns took good toll,

though at first hardly to the extent that might have been expected, for the extraordinarily clear visibility tempted the inexperienced to shoot at abnormally high birds. Also, alas! the noses of the two tykes left much to be desired, and both on land and water many corpses had perforce to be abandoned.

The evening flight commenced about 4 p.m., and standing in the long spear grass bordering the water, fighting manfully



OUT WITH THE MISCREANT DOGS.

quarters. Anchor was dropped, the siren coughed out its asthmatic shriek and a boat, propelled by two Koreans, put off from shore; two squat, sturdy figures robed in white—Korea's universal wear—whose white teeth gleamed in a broad smile of welcome. Personnel and stores were landed on a beach entirely composed of shells. Even at that early hour—4 a.m.—two Korean women were busily at work shelling fish. These,

the while against hordes of mosquitoes, the guns would see the sky black with wedge after wedge of duck and teal flying past, hour after hour, upon their southward course. Gradually the evening fell, the sun sank a ball of fire into the flaming west, the summits of the Manchurian mountains changed through all the most gorgeous hues of crimson, amethyst, purple and blue until a grey pall hid their glories, and the stillness of a wonderful night settled upon the lonely land.

During that first half-hour after sunset the heavier part of the bags was made, for the teal, flashing down the course of the rivers and the duck flying at less lofty altitudes, presented easier targets to the waiting guns. Then the darkness descended in real earnest and "home" was the word. Home to a welcome cocktail, an excellent dinner, to beds on the beach, lulled by the gentle murmur of the sea.

On the day before the return trip an expedition was made to a big lagoon lying close to the seashore, some seven miles south of the camp. On nearing it many duck were seen on the move, so, hastily selecting positions, the party cautiously approached. As they reached the borders of the lagoon a vast multitude of duck fully five thousand strong—some said ten thousand—rose in air. The vast concourse fairly darkened the sun and caused the air to vibrate with the whirring of their wings. On the borders of this lagoon the day was spent to very great profit, and so enthralling was the sight of such enormous multitudes of wildfowl that on the following morning some energetic members of the party quitted their beds at 4.30 a.m. and again made their way to the southern lagoon. They reached it just as the sun emerged flaming red out of "a sea of glass mingled with fire." Again the duck rose in countless

myriads—against the crimson morning sky they looked like throngs of swarming bees—and again there ensued a tremendous battue.

But, alas! the inexorable flight of time permitted but a brief stay, for out in the bay the tug that was to carry the party back to Vladivostock was already getting up steam. So very reluctantly backs were turned on the enchanting lagoon, and the tramp back to camp was begun. One of the party made, however, a short divergence towards a narrow inlet from which arose at his approach the "honk-honk" of a gaggle of geese. Two heavy bodies fell with a plump to earth, a third, wounded, was accounted for a little later. Then on to headquarters and anon out to the waiting tug. Already the wildfowling expedition to Korea had joined many other delightful shooting expeditions of the past. But this was one of the most uniquely enjoyable that any member of the party had ever experienced. The wild, unknown country, the bivouac beside the surging surf, the sense of *bonne camaraderie* which never once failed—all had their indescribable charm. Sport was superlatively good, though as, unfortunately, no records were kept, the precise bag cannot here be given. It included, besides stray geese, pheasants, quail and snipe, numbers of mallard, teal, pintail and shoveller, but the gadwall formed the vast majority. Not a single wigeon was seen.

The Russian owners of the miscreant dogs declared that in the mists and storms of chill October and again during the spring immigration in March game was even more abundant than their British *confrères* had found it. But the mind could scarcely conceive vaster numbers than those myriads of duck which rose like swarming bees against the red morning sky.

AN OVERSEAS BRIDE IN RHODESIA

I MUST confess that as the train dragged us slowly and laboriously across great tracts of brown grassland, stretches of forest-like bush, and craggy hills with no sign of human habitation, I began to dwell, perhaps unduly, on the stories of snakes, lions and other horrors whose natural home seemed to me the Zoo, which my fellow voyagers had kindly told me from time to time. The idea of snakes making a habit of crawling between blankets was particularly hideous to me. It seemed so terribly unoccupied, this country—an empire to let. We saw no one along the line but a few natives, who ran beside the train when it stopped (as it did frequently), selling wonderful karrosses, prehistoric animals roughly carved, and immense python skins—a proof of the real existence of the horrors in which I had only half believed. As we drew near the siding abutting on our own land the train paused in mid-career for twenty-four hours. Something unforeseen had happened to a bridge—an everyday occurrence in Rhodesia—and in the end we had to walk across that bridge on planks!

Our farm, as far as I could see, as, surrounded by our gear and stores, we watched the tail-end of all-the-home-we-had-known-for-a-week disappearing round a curve ahead, consisted of a vast expanse of yellowy green grass twelve and fourteen feet high, dotted with trees and stony hills. I must confess that I was extremely loath to follow John into that jungle of grass. At least on the railroad track you saw what you were treading on. I thanked my stars that I wore a very short skirt and strong canvas gaiters. The latter kept grass seeds out of my stockings, prickles from my legs, and were a great protection against snakes. After some tramping we discovered a fairly flat space about a mile from the line, and a few natives, who appeared like mushrooms from the earth, soon had this cleared. The tent was erected, a fire made, and we had tea. Home was established.

Everyone in England can picture a camp fire at evening, with the sound of natives chattering and what I believe is usually alluded to as "the thousand voices of the night." What you will not so easily imagine in your snug brick house is the horrible cold—it was winter here—which, until you are used to it, freezes your back even while your feet toast at the fire, and which, when you have retired to your stretcher under many blankets, creeps up from the ground beneath you in a dull, aching sense of chill. That soon taught us to put sacks filled with grass on our stretchers. I even preferred the thought of possible crawlies to that unconquerable cold.

The first day in camp was full of interest—and problems! To begin with, two other natives came to call, carrying assegais and wearing wonderful fur caps which I coveted for toques. I thought they were hostile chiefs, but discovered they were old boys of John's (he was in this district before the war) who had come to work for him and to thank him for fighting the Germans. This they did in their own language, which was interpreted to me. It was quite touching, as was also their awe and horror at the fact that he has lost a leg and wears an artificial one.

The problem of housekeeping hundreds of miles from nowhere had sounded very disturbing when considered from within easy reach of butchers, fishmongers and cake shops. But

when, during that first day on the veldt, natives came up with eggs to sell or barter, vegetables and sweet potatoes, it did not seem so bad. John shot a small buck the first evening, and soon, I knew, we would have cattle and thereby milk and butter.

We are starting at once to put up rough buildings of reeds and poles for our stock. Meanwhile, the wild things we see which have not yet learnt any real fear of man are a most fascinating study. Natives with light assegais and traps they have, to some extent, learnt to avoid. They have never been harried by a gun, and as we walk partridges rise quite close by, and we come across all kinds of buck. To-day a doe with two small kids—twins, I suppose—met us in the high grass and stared quite a time before she hurried her family away. From a tree a tiger cat chattered at us. And if we see so many wild things, how many more there must be who glide away unseen before we reach them.

But this rough walking is a strain on John, so we have bought a mule and donkey to carry us around. It is delightful to find that he can ride quite comfortably. Land runs so big out here, and we want to see all over our estate before we decide where to build the house, what land to plough, and where to keep our livestock.

Now we are out of our blankets at daybreak—it is ever so much easier to get up in a tent than in a house, you are so much nearer the outside world to begin with. I use my land-worker kit of breeches and coat all the time. We drink coffee and have a plate of mealie meal porridge (which is really quite good and rather like hominy), and then away round the land on George and Josh. George is a big white donkey, and mine, a perfect gentleman of Zanzibar origin with a most comfortable canter. He was sent to us in the guard's van as there was no cattle truck available the day he travelled. Six men lifted a very worried-looking George out of the train at our siding. His only fault is that he steals, but when he is scolded he looks so sorry. Josh, on the other hand, is a deceitful-looking mule; he carries John about with a very bad grace and occasionally kicks at his feet. The day he hit the Roehampton leg Josh had to think things out all over again.

On our rides we go to watch the boys who are making bricks to build our house. We see the ever-increasing cattle kraals, and count the days before the sale from which we hope to bring back some beasts. A mile further on, near the bed of the river, other boys are clearing the ground for a vegetable garden which will be under my direction. Away to our right is the rolling veldt, where the grass reaches over my head even when I am mounted on George, and where, with the help of a tractor, we plan soon to see the long furrows instead of the high grass. That is where my war work in Sussex will help—I know that a woman can plough in the modern way, while if we kept the old picturesque team of eighteen or twenty oxen I would be no help to John at all. Rhodesia is so much a man's country that I feel a woman must be interested in man's work and man's play—or perish.

It is an absorbing life-work, or a hobby, view it how you will—this turning a bit of the old primitive globe into a productive piece of civilisation.

MOLLY TORIN.

NATURE NOTES

THE SKUA ROBS THE GULL

A FEW weeks ago I was informed by a fisherman that on the previous morning, when setting out to sea, he had seen a large and peculiar bird on the east sands of St. Andrews Bay. His description did not afford any assistance in identification, for "it was a large bird, nearly black, with a hooked beak, not a gull, and from time to time it twisted its head backwardly over the body." I decided, if possible, to see it for myself, and so next day when the cold grey light of an autumn morning had broken, I set out on my quest.

Making my way along the bents, I viewed the deserted shore from end to end, but beyond one or two herring gulls in the distance, it was deserted. The fishing boats were now far out and dotted the seascape in the far distance. After waiting some time a large flock of herring gulls suddenly wheeled round the East Cliffs and settled down almost in front of me. These were quickly joined by a smaller number of black-headed gulls, and among the lot I observed, through the glasses, two strange wildfowl. Having seen them once before on this shore there was no mistaking the two birds, they were undoubtedly great skuas, probably male and female.

Keeping them under very close observation, it was possible to note the peculiar habit, observed by the fisherman, of turning their heads backwardly over the body. They were fully alert and keeping a close watch upon the surrounding gulls. After a minute or two some of the herring gulls rose and hovered for a time over the incoming tide, then one, dashing down, seized a fish of some kind. Now commenced the scene of which I had often read,

over the shore, and then sweeping down it flew out to sea, only to return quickly and sweep in a low flight along the shore—finally it rose again and disgorged its recent capture, a rather smaller fish than the one described above. This was quickly caught and swallowed in mid air by the pursuing skua.

Both of the skuas then rested for some time on the shore close to the gulls. On the dispersal of the gulls, both birds stood for a time, evidently fully satisfied with the course of events and then, spreading their wings, both flew out to sea in a northerly direction, leaving the writer more than satisfied with the morning's observations.

WALTER E. COLLINGE.

SOME MORE ABOUT DRINKLESS BEASTS.

In the desert districts of Mexico large animals are known to live for many months without water. Deer and peccary have been found in regions thirty or forty miles away from water; and there is always a large population of small rodents which live exclusively on grain food. But here, as elsewhere, there is a type of flora which provides moisture, namely, a succulent cactus on which the larger game feeds. The small rats and mice have been proved, by actual experiment, to be able to live for two or three years on hard seeds without water.

The natives of these regions used to be able to live in absolute desert by resorting to the same type of food supply as the antelope find in Arabia or the Sahara. Dr. Lumholtz claims that for a couple of months their main means of subsistence was a large and fleshy root-parasite which grows on the naked sand-dunes. These roots are a specially delicious relish to thirsty man, and they also quickly appease his hunger.

More remarkable still is the fact that man has been able to accustom his domesticated herds to long abstinence from drinking; showing again how local conditions can affect individuals that are directly under their influence. In Chinese Turkestan the Turki shepherds are in the habit of taking their flocks into the saline deserts where they thrive for long periods without water. Horses are very susceptible to thirst, but the half-wild horses of Mexico can go till the second or third day without drinking. Dr. Lumholtz gives some remarkable instances of the ability of horses and cattle to live in the waterless regions of Mexico. He says that a certain "choya" furnishes for at least three months of the year the staple food, as well as the only drink, of the cattle of one part of the district of Altar. Both cheese and butter are made, and the milk from the cows that eat choya has the reputation of being very good. I was assured

that, even if driven to the dam, the cows did not care to drink. In other districts, when the winter's rain has called into existence certain species of plants, the cattle and horses are able to exist there for three months, absolutely without water. "Even horses," Dr. Lumholtz goes on to say, "do not come in to drink of their own free will every day during the winter. In my travels it was the usual thing during the winter time for our animals to go without water every second day."

In other countries camels have adapted themselves to their surroundings and are capable of long-sustained abstinence. When being hard ridden, they can be depended upon for seven to eight days without water, taking for granted that they are in good condition and that their humps are fat. In Central Asia, during winter, the Bactrian camel is practically indifferent as to whether he gets a drink or not. It is largely a question of the heat to which the camels are exposed, and the amount of energy that is being taken out of them. There is no unfrozen water in winter over large areas of Central Asia, and although natives use the snow, it is said that the wild animals will never touch it, the reason being, no doubt, because they do not need it. When camels are hard worked the conditions are altered. Mr. Ellsworth Huntington instances an occasion in the desert of Lop, in Chinese Turkestan, when he took his camels, during winter, laden, over very bad ground, and, apparently at a fast pace, for he was making time in order to reach water. On the seventh day his camels seemed to suffer more from hunger than from thirst, and when they got to water they did not drink until they had eaten their bellies full of dry reeds and camelthorn.

D. CARRUTHERS.



A. J. R. Roberts.

THE GREAT SKUA.

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but never before actually witnessed. Immediately the gull rose and one of the skuas gave chase, both birds dashed along the shore, flying low, then the gull rose a little, still closely pursued by the skua; next a sudden dive was made, followed by an upward and somewhat zig-zag course of flight at high speed. The skua was now immediately behind the gull, sometimes above it, but more often below. The gull next made a turn and steered for the fields above the east cliffs, with the enemy closely on the trail. Here I felt I had lost them, but not so, for in less than half a minute the gull quickly retraced its course back to the sea. Along the shore it scurried once more, then backing a little, it quickly returned. Rising again it made two or three circling flights, but all to no effect, for it at last disgorged its capture, which was almost immediately caught by the skua before it reached the ground.

It was a fish, probably a haddock, and gins, or roins, in length. It has been stated that the skua always swallows the captured food, and that it will refuse to eat it if it falls on to the ground. On this occasion the skua did not swallow the fish, but, alighting on the shore, not more than 30 yds away from me, it ripped off, so far as I could see, one side of the body, which it immediately swallowed. It then proceeded to separate the head from the remainder with its powerful hooked beak. Finally it swallowed the remaining part, and with the head in its beak, flew away to join its mate. What happened further I do not know, for almost immediately upon alighting, its mate had commenced a similar chase after a black-headed gull. The tactics pursued were very similar to those of the herring gull, just described, but of shorter duration. The gull rose two or three times